Geometry Name_____

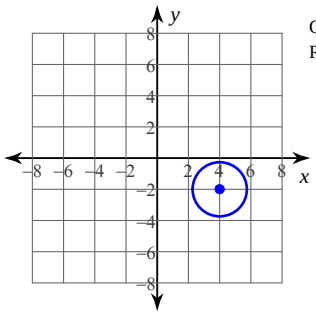
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

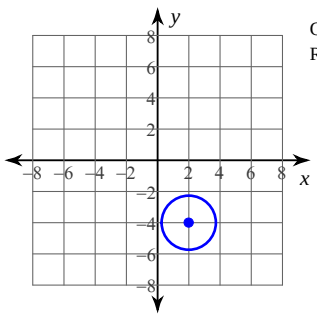
1) $y^2 + x^2 - 8x = -17 - 4y$

A)



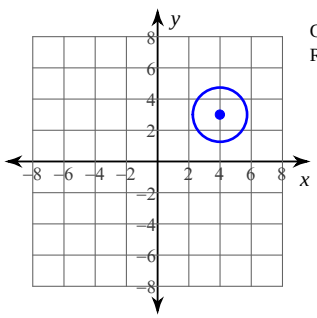
Center: (4, –2)
Radius: $\sqrt{3}$

B)



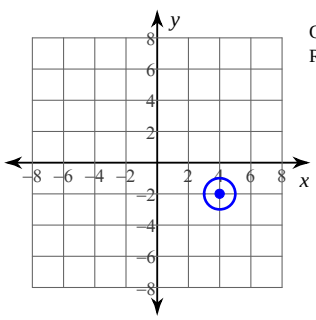
Center: (2, –4)
Radius: $\sqrt{3}$

C)



Center: (4, 3)
Radius: $\sqrt{3}$

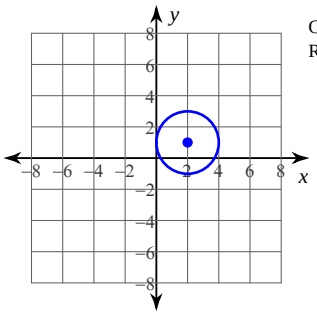
D)



Center: (4, –2)
Radius: 1

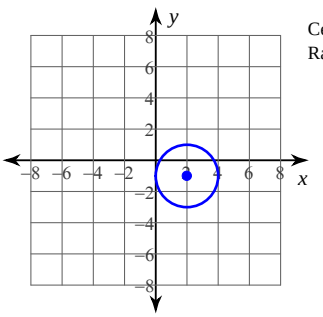
2) $-4x = -1 - y^2 - x^2 - 2y$

A)



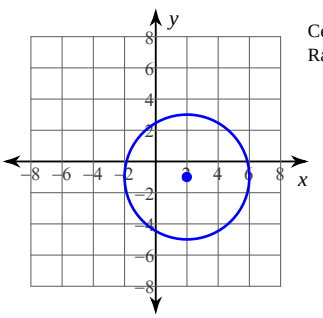
Center: (2, 1)
Radius: 2

B)



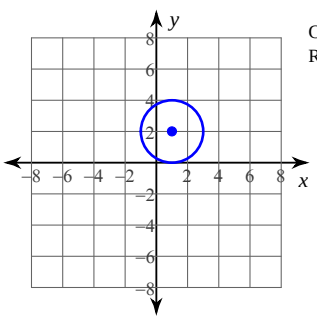
Center: (2, –1)
Radius: 2

C)



Center: (2, –1)
Radius: 4

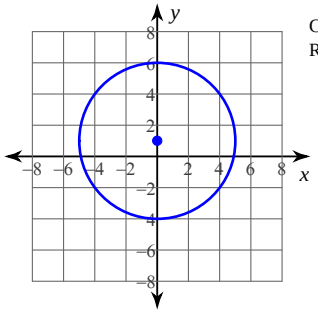
D)



Center: (1, 2)
Radius: 2

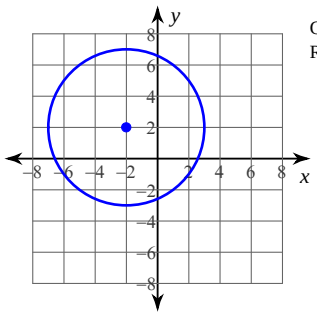
3) $y^2 = -x^2 + 25$

A)



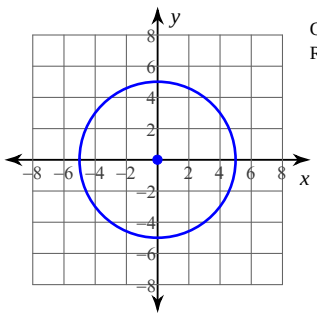
Center: (0, 1)
Radius: 5

B)



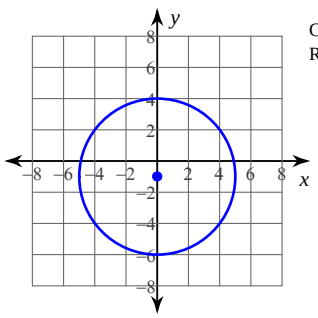
Center: (−2, 2)
Radius: 5

C)



Center: (0, 0)
Radius: 5

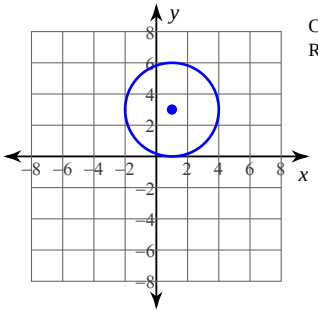
D)



Center: (0, −1)
Radius: 5

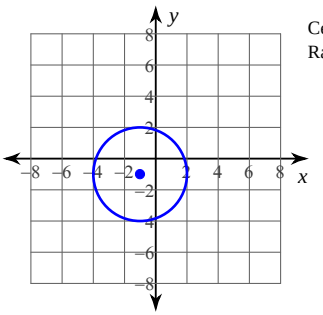
4) $y^2 - 2y + x^2 + 2x = 7$

A)



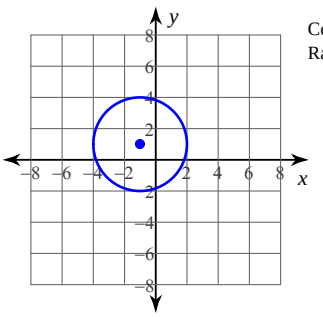
Center: (1, 3)
Radius: 3

B)



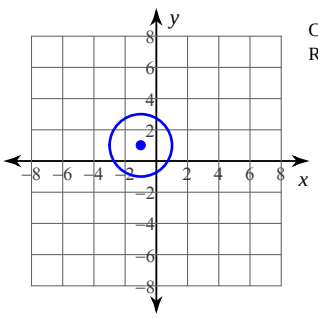
Center: (−1, −1)
Radius: 3

C)



Center: (−1, 1)
Radius: 3

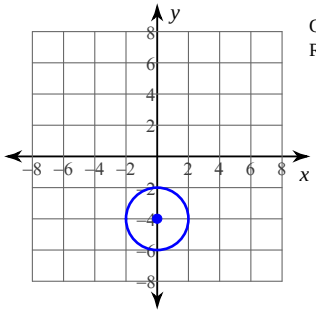
D)



Center: (−1, 1)
Radius: 2

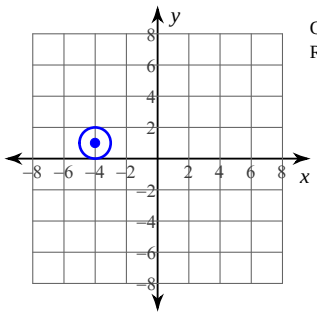
5) $-2y + y^2 = -8 - 8x - x^2$

A)



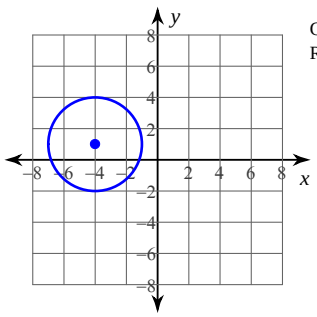
Center: (0, –4)
Radius: 2

B)



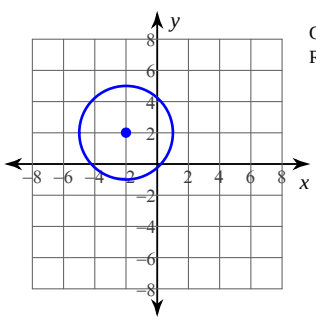
Center: (–4, 1)
Radius: 1

C)



Center: (–4, 1)
Radius: 3

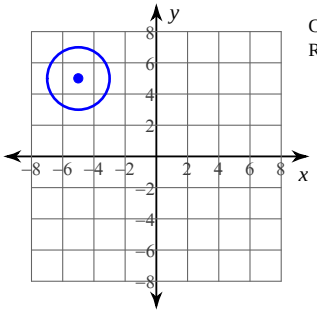
D)



Center: (–2, 2)
Radius: 3

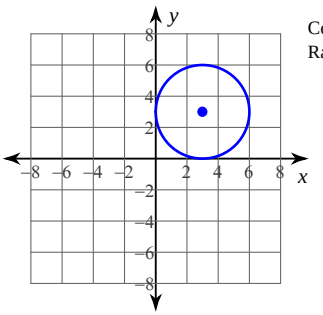
6) $y^2 - 6x = 6y - x^2 - 9$

A)



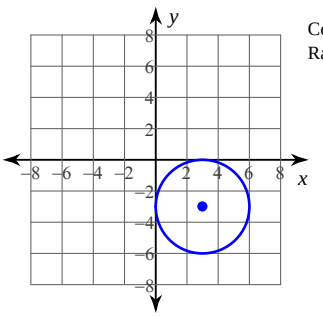
Center: (–5, 5)
Radius: 2

B)



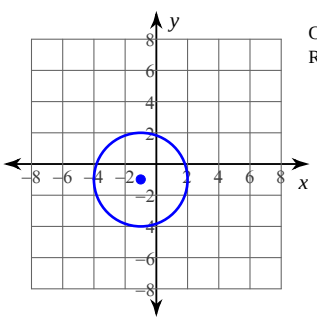
Center: (3, 3)
Radius: 3

C)



Center: (3, –3)
Radius: 3

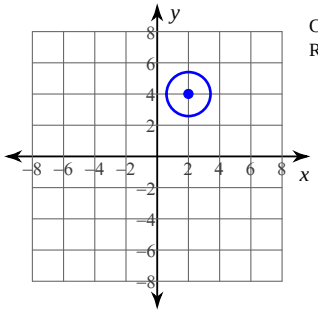
D)



Center: (–1, –1)
Radius: 3

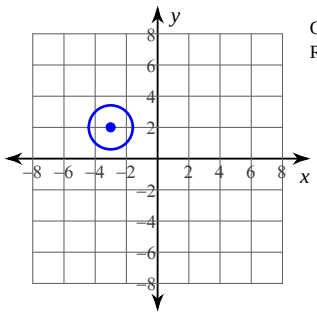
7) $-4x + x^2 + 18 = 8y - y^2$

A)



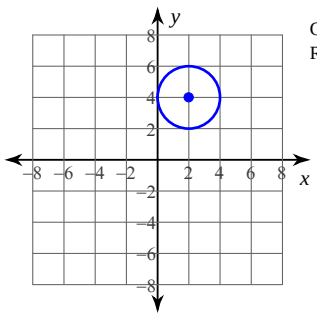
Center: $(2, 4)$
Radius: $\sqrt{2}$

B)



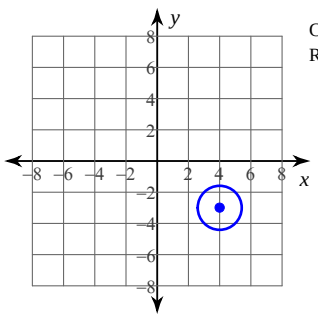
Center: $(-3, 2)$
Radius: $\sqrt{2}$

C)



Center: $(2, 4)$
Radius: 2

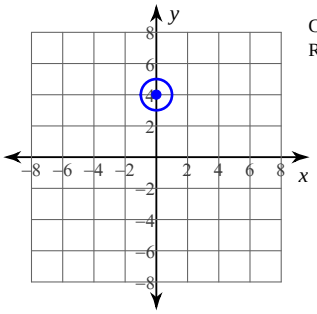
D)



Center: $(4, -3)$
Radius: $\sqrt{2}$

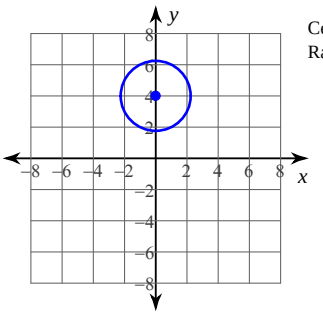
8) $x^2 + (y-4)^2 = 5$

A)



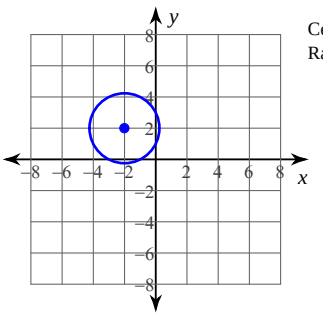
Center: $(0, 4)$
Radius: 1

B)



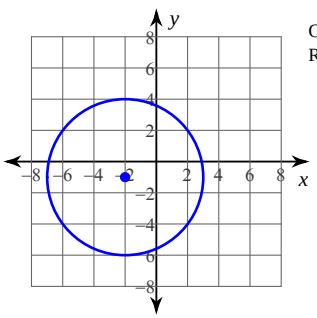
Center: $(0, 4)$
Radius: $\sqrt{5}$

C)



Center: $(-2, 2)$
Radius: $\sqrt{5}$

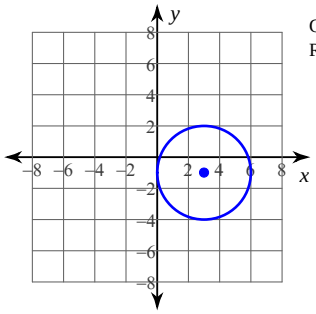
D)



Center: $(-2, -1)$
Radius: 5

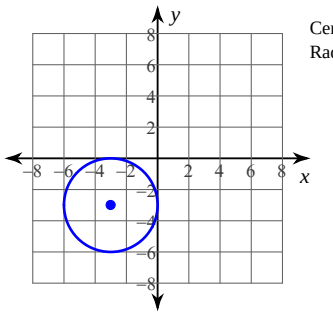
9) $(x+3)^2+(y+3)^2=9$

A)



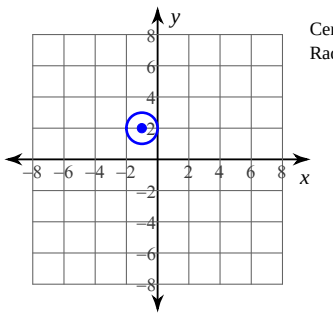
Center: (3, –1)
Radius: 3

B)



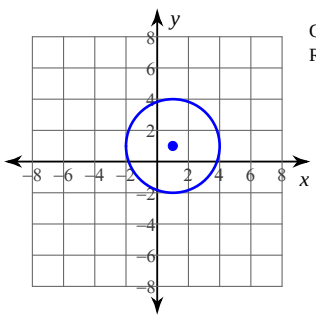
Center: (–3, –3)
Radius: 3

C)



Center: (–1, 2)
Radius: 1

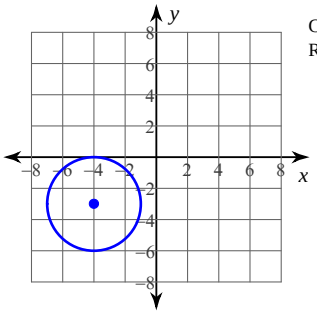
D)



Center: (1, 1)
Radius: 3

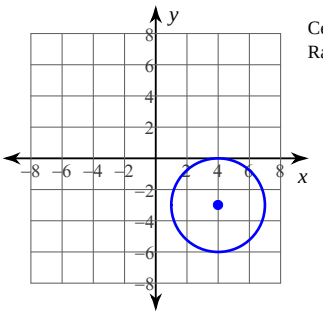
10) $(x+4)^2+(y+3)^2=1$

A)



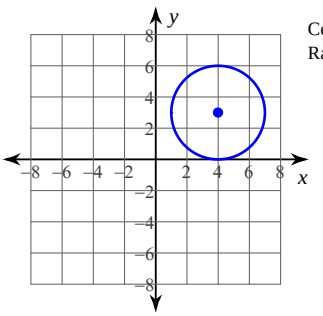
Center: (–4, –3)
Radius: 3

B)



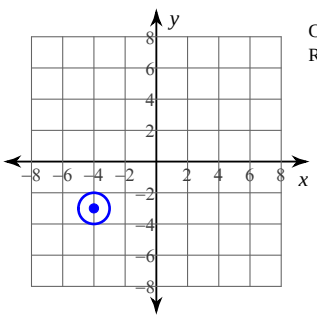
Center: (4, –3)
Radius: 3

C)



Center: (4, 3)
Radius: 3

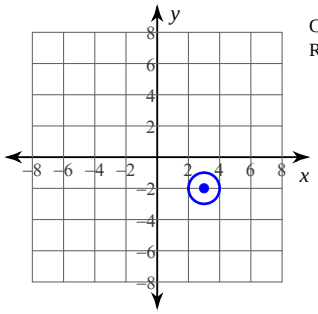
D)



Center: (–4, –3)
Radius: 1

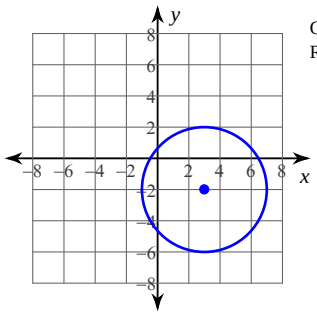
11) $(x-3)^2+(y+2)^2=16$

A)



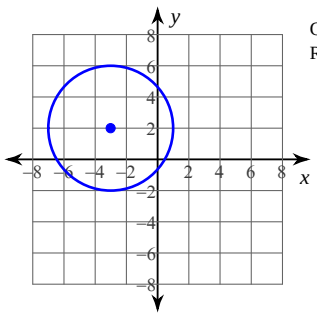
Center: (3, –2)
Radius: 1

B)



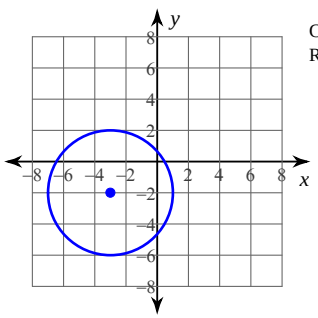
Center: (3, –2)
Radius: 4

C)



Center: (–3, 2)
Radius: 4

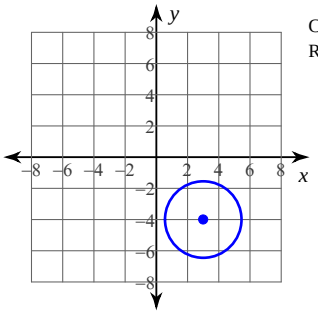
D)



Center: (–3, –2)
Radius: 4

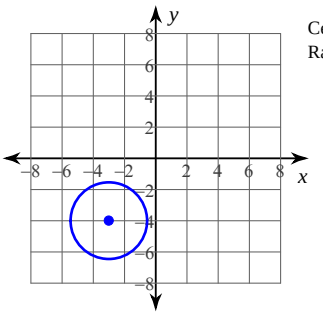
12) $(x-4)^2+(y-3)^2=6$

A)



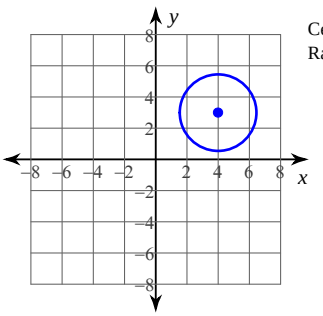
Center: (3, –4)
Radius: $\sqrt{6}$

B)



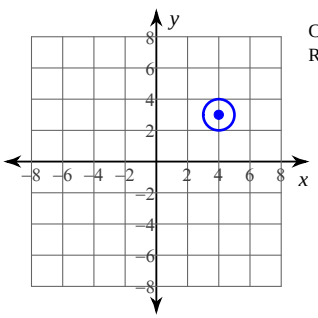
Center: (–3, –4)
Radius: $\sqrt{6}$

C)



Center: (4, 3)
Radius: $\sqrt{6}$

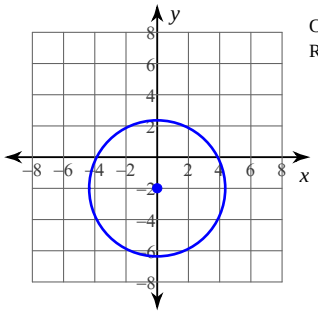
D)



Center: (4, 3)
Radius: 1

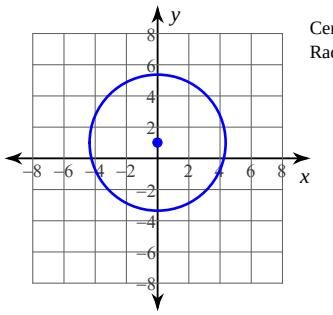
13) $(x+1)^2 + y^2 = 19$

A)



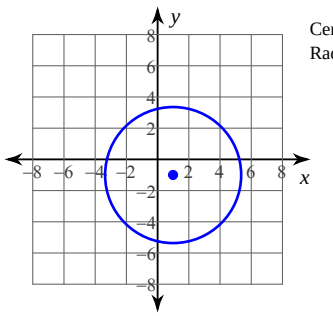
Center: $(0, -2)$
Radius: $\sqrt{19}$

B)



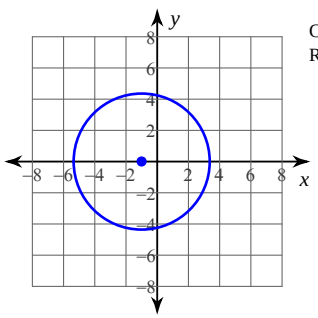
Center: $(0, 1)$
Radius: $\sqrt{19}$

C)



Center: $(1, -1)$
Radius: $\sqrt{19}$

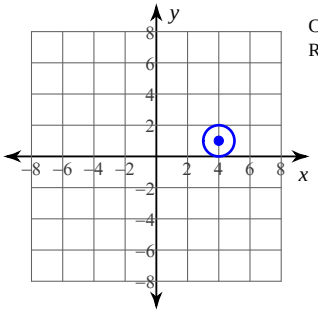
D)



Center: $(-1, 0)$
Radius: $\sqrt{19}$

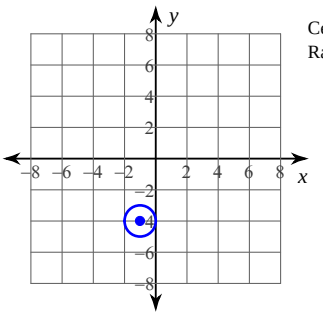
14) $x^2 - 8x = -y^2 - 16 + 2y$

A)



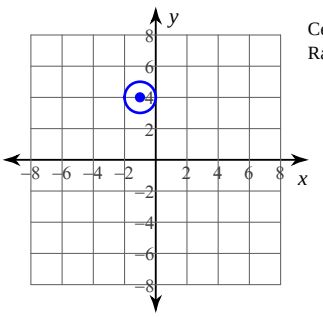
Center: $(4, 1)$
Radius: 1

B)



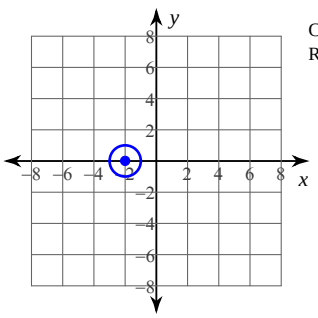
Center: $(-1, -4)$
Radius: 1

C)



Center: $(-1, 4)$
Radius: 1

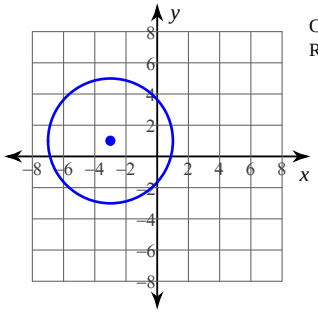
D)



Center: $(-2, 0)$
Radius: 1

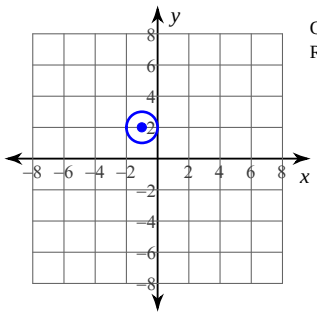
15) $-2y + x^2 = -y^2 + 6 - 6x$

A)



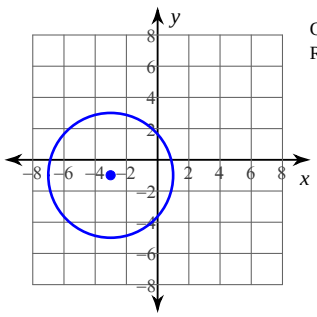
Center: (–3, 1)
Radius: 4

B)



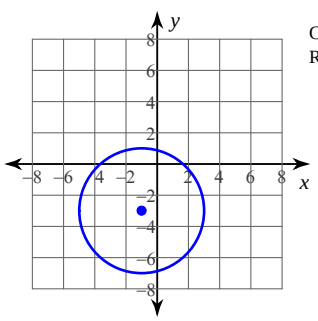
Center: (–1, 2)
Radius: 1

C)



Center: (–3, –1)
Radius: 4

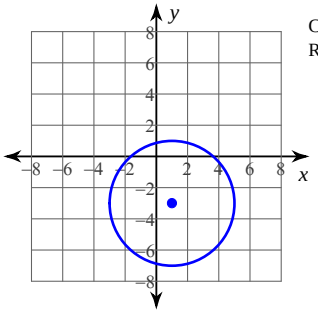
D)



Center: (–1, –3)
Radius: 4

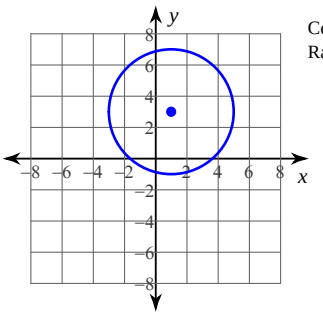
16) $-6y + y^2 - 6 + x^2 = 2x$

A)



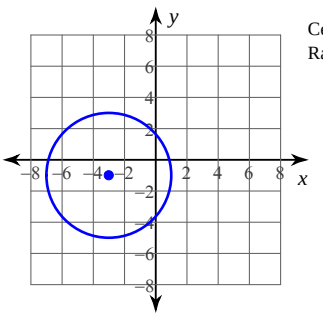
Center: (1, –3)
Radius: 4

B)



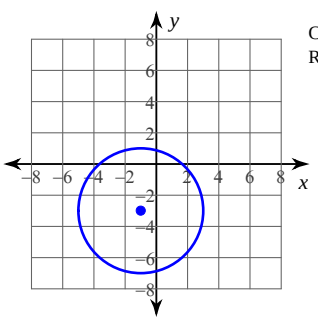
Center: (1, 3)
Radius: 4

C)



Center: (–3, –1)
Radius: 4

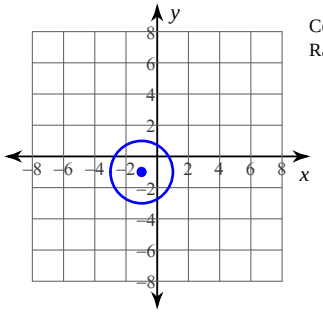
D)



Center: (–1, –3)
Radius: 4

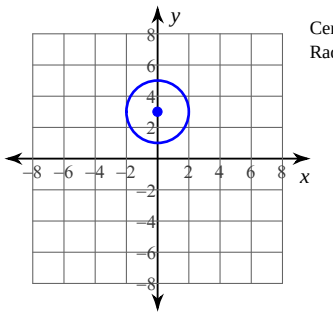
17) $-6y = -y^2 - 5 - x^2$

A)



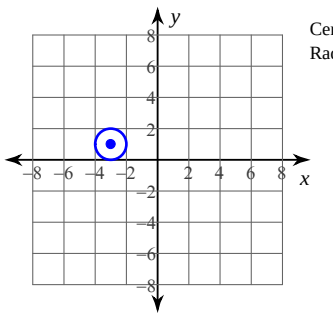
Center: $(-1, -1)$
Radius: 2

B)



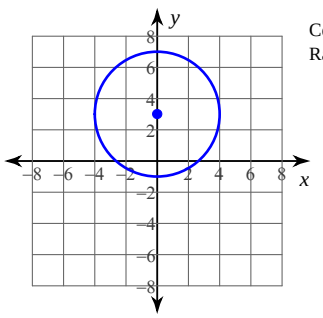
Center: $(0, 3)$
Radius: 2

C)



Center: $(-3, 1)$
Radius: 1

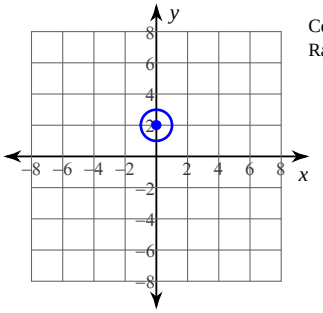
D)



Center: $(0, 3)$
Radius: 4

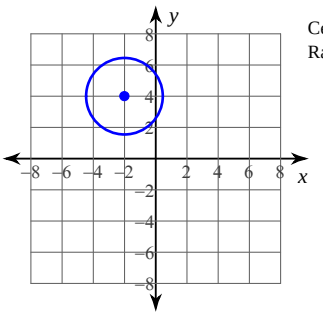
18) $14 - 8y + x^2 = -y^2 - 4x$

A)



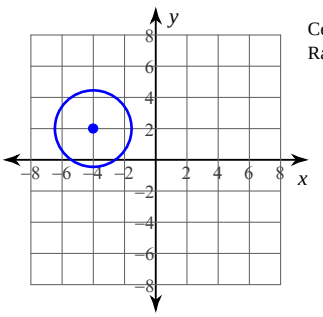
Center: $(0, 2)$
Radius: 1

B)



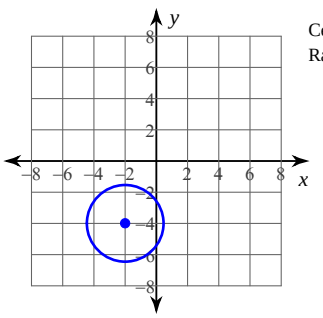
Center: $(-2, 4)$
Radius: $\sqrt{6}$

C)



Center: $(-4, 2)$
Radius: $\sqrt{6}$

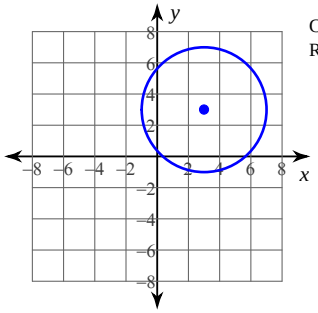
D)



Center: $(-2, -4)$
Radius: $\sqrt{6}$

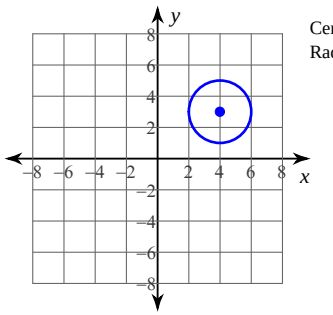
19) $14 + 6y - 6x + y^2 = -x^2$

A)



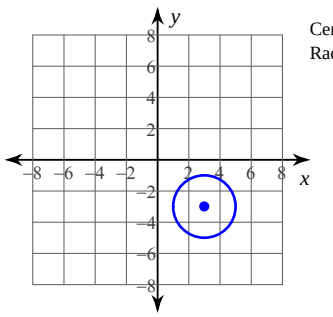
Center: (3, 3)
Radius: 4

B)



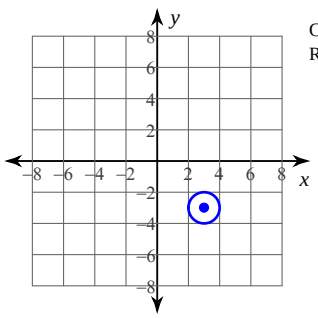
Center: (4, 3)
Radius: 2

C)



Center: (3, –3)
Radius: 2

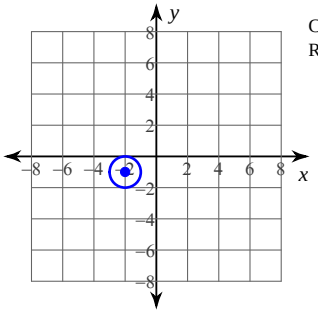
D)



Center: (3, –3)
Radius: 1

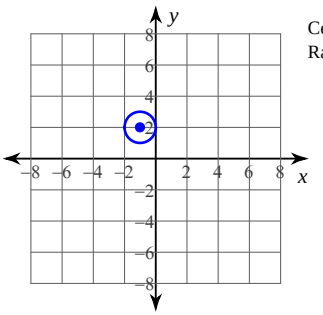
20) $4 = -x^2 - y^2 + 2x - 4y$

A)



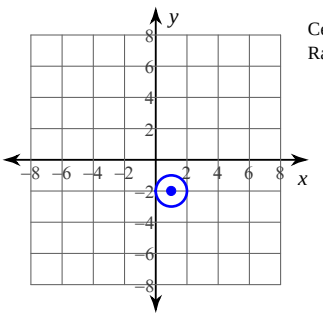
Center: (–2, –1)
Radius: 1

B)



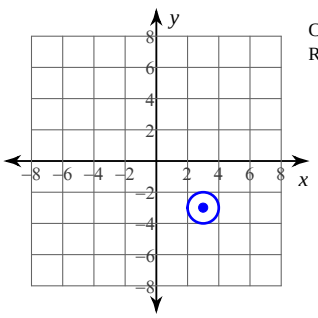
Center: (–1, 2)
Radius: 1

C)



Center: (1, –2)
Radius: 1

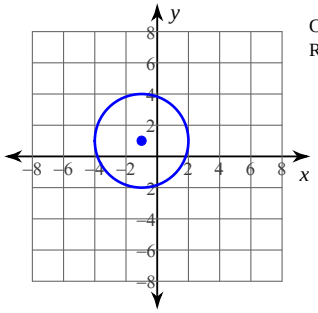
D)



Center: (3, –3)
Radius: 1

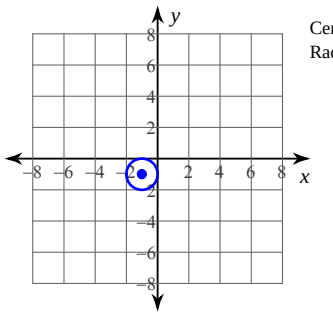
21) $-7 = -y^2 - 2y - 2x - x^2$

A)



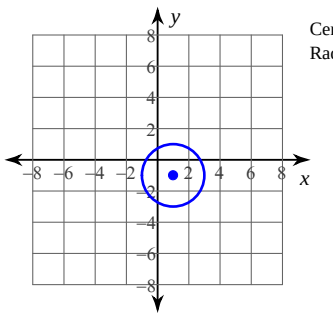
Center: $(-1, 1)$
Radius: 3

B)



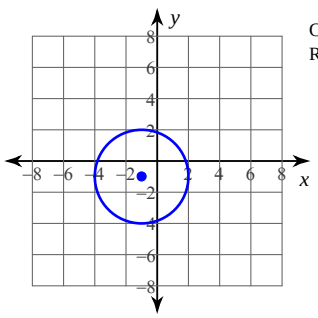
Center: $(-1, -1)$
Radius: 1

C)



Center: $(1, -1)$
Radius: 2

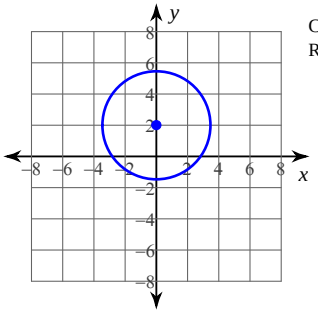
D)



Center: $(-1, -1)$
Radius: 3

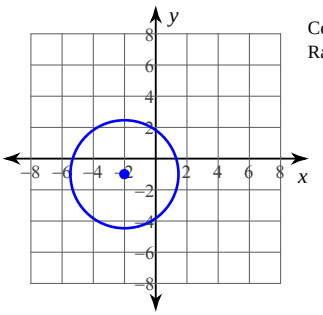
22) $-8 + 4x = -x^2 - y^2$

A)



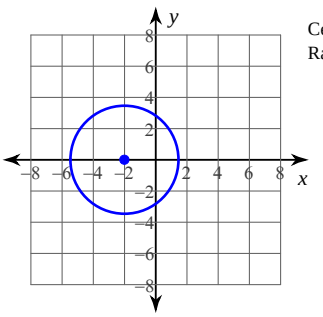
Center: $(0, 2)$
Radius: $2\sqrt{3}$

B)



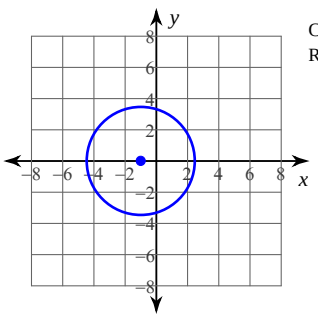
Center: $(-2, -1)$
Radius: $2\sqrt{3}$

C)



Center: $(-2, 0)$
Radius: $2\sqrt{3}$

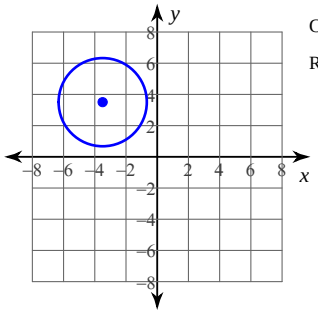
D)



Center: $(-1, 0)$
Radius: $2\sqrt{3}$

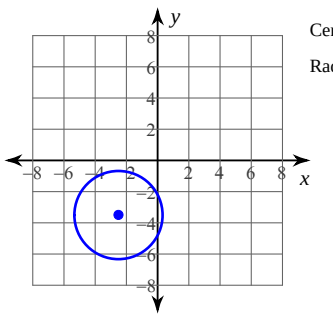
23) $14x + 2y^2 = 14y - 33 - 2x^2$

A)



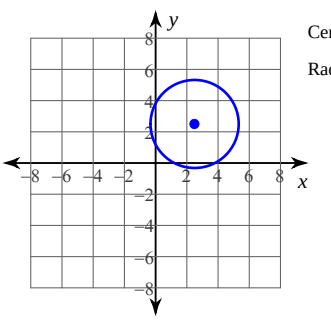
Center: $\left(-\frac{7}{2}, \frac{7}{2}\right)$
Radius: $2\sqrt{2}$

B)



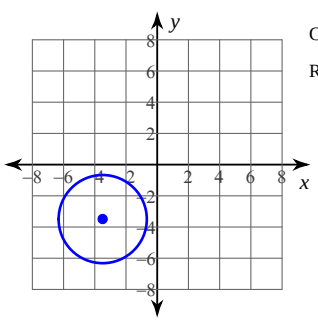
Center: $\left(-\frac{5}{2}, -\frac{7}{2}\right)$
Radius: $2\sqrt{2}$

C)



Center: $\left(\frac{5}{2}, \frac{5}{2}\right)$
Radius: $2\sqrt{2}$

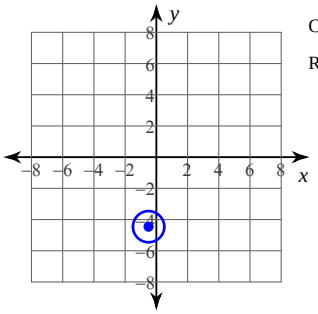
D)



Center: $\left(-\frac{7}{2}, -\frac{7}{2}\right)$
Radius: $2\sqrt{2}$

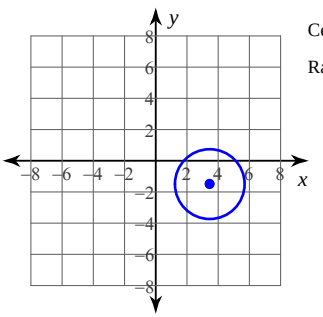
24) $4x^2 + 37 - 16x\sqrt{3} = -12y - 4y^2$

A)



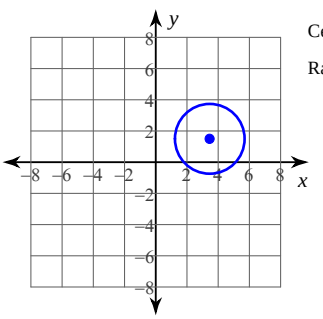
Center: $\left(-\frac{1}{2}, -2\sqrt{3} - 1\right)$
Radius: 1

B)



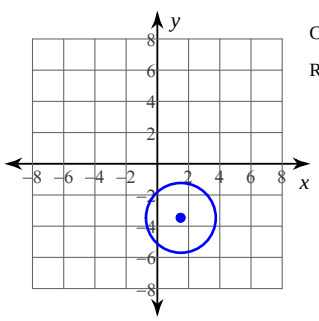
Center: $\left(2\sqrt{3}, -\frac{3}{2}\right)$
Radius: $\sqrt{5}$

C)



Center: $\left(2\sqrt{3}, \frac{3}{2}\right)$
Radius: $\sqrt{5}$

D)



Center: $\left(\frac{3}{2}, -2\sqrt{3}\right)$
Radius: $\sqrt{5}$

Answers to Assignment (ID: 1)

1) A
2) B
3) C
4) C
5) C
6) B
7) A
8) B
9) B
10) D
11) B
12) C
13) D
14) A
15) A
16) B
17) B
18) B
19) C
20) C
21) D
22) C
23) A
24) B

Geometry Name_____

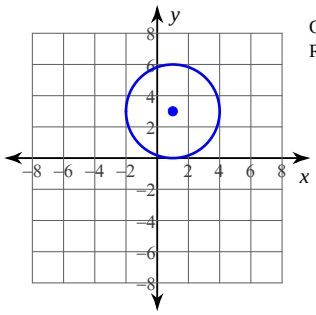
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

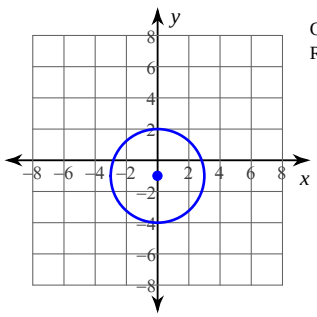
1) $4x - 6y + x^2 = -y^2 - 4$

A)



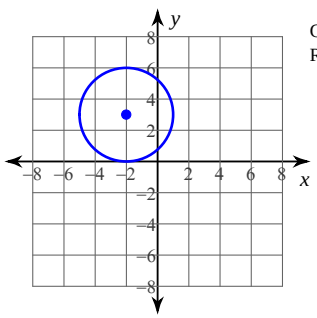
Center: (1, 3)
Radius: 3

B)



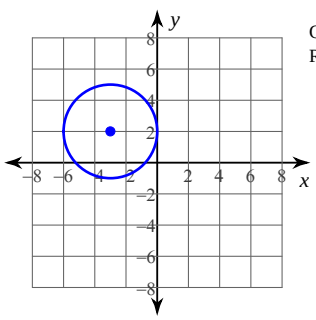
Center: (0, –1)
Radius: 3

C)



Center: (–2, 3)
Radius: 3

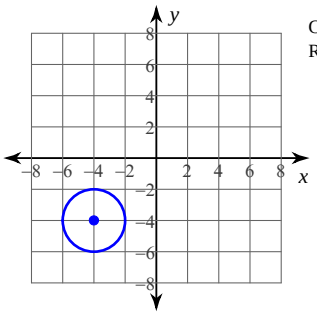
D)



Center: (–3, 2)
Radius: 3

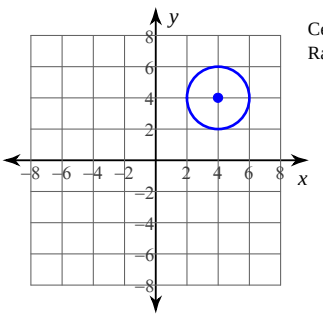
2) $28 + 8y = -x^2 - y^2 - 8x$

A)



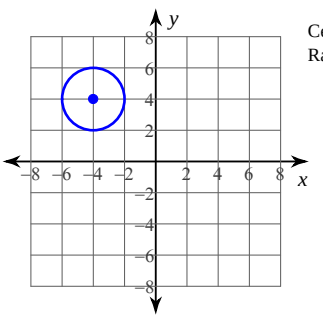
Center: (–4, –4)
Radius: 2

B)



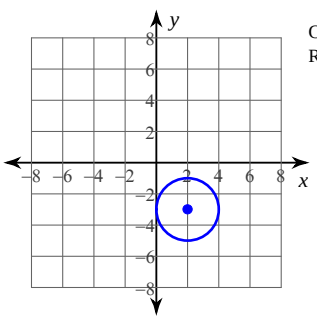
Center: (4, 4)
Radius: 2

C)



Center: (–4, 4)
Radius: 2

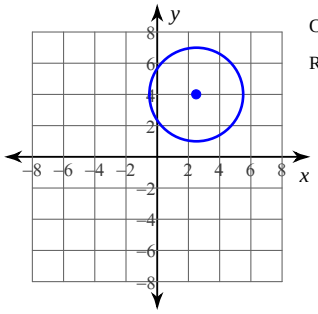
D)



Center: (2, –3)
Radius: 2

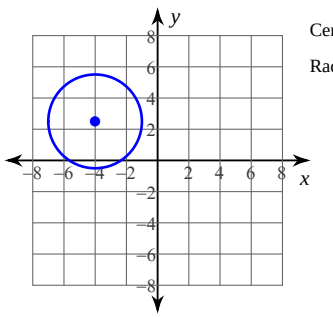
3) $4x^2 - 32y + 4y^2 = -53 - 20x$

A)



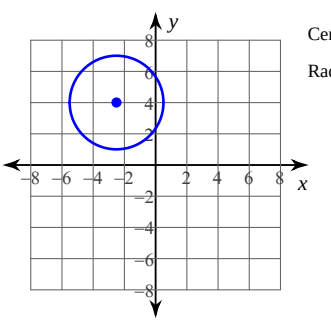
Center: $\left(\frac{5}{2}, 4\right)$
Radius: 3

B)



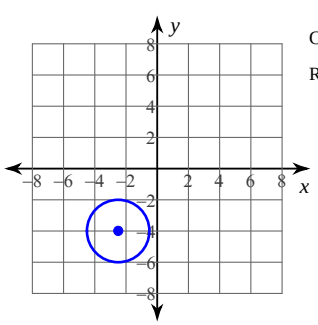
Center: $\left(-4, \frac{5}{2}\right)$
Radius: 3

C)



Center: $\left(-\frac{5}{2}, 4\right)$
Radius: 3

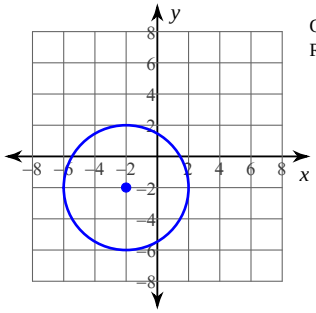
D)



Center: $\left(-\frac{5}{2}, -4\right)$
Radius: 2

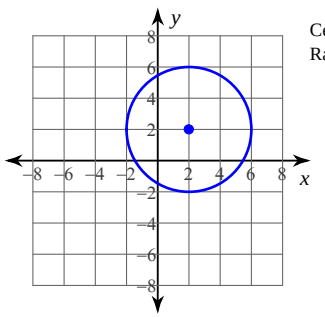
4) $-4x - 4y + x^2 - 8 = -y^2$

A)



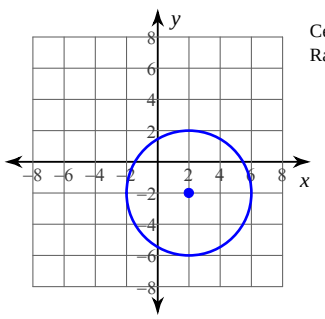
Center: $(-2, -2)$
Radius: 4

B)



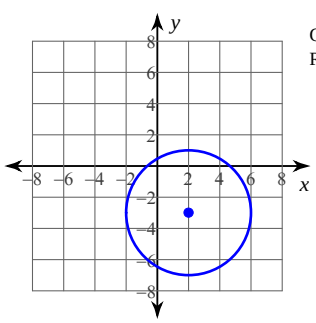
Center: $(2, 2)$
Radius: 4

C)



Center: $(2, -2)$
Radius: 4

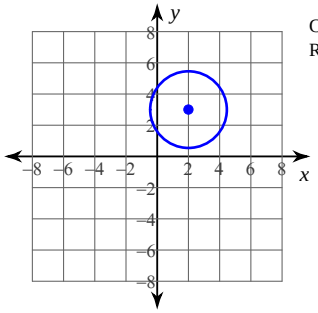
D)



Center: $(2, -3)$
Radius: 4

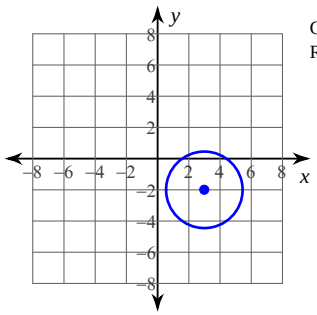
5) $7 - 4x = -y^2 - x^2 - 6y$

A)



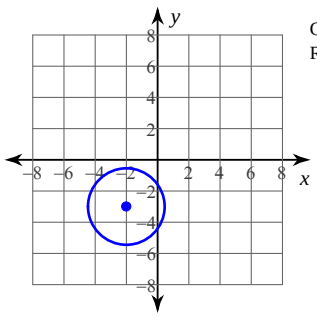
Center: $(2, 3)$
Radius: $\sqrt{6}$

B)



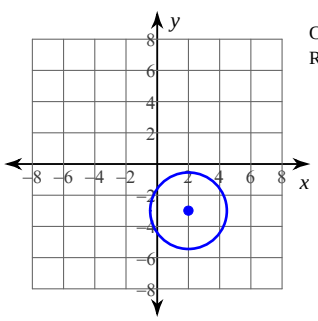
Center: $(3, -2)$
Radius: $\sqrt{6}$

C)



Center: $(-2, -3)$
Radius: $\sqrt{6}$

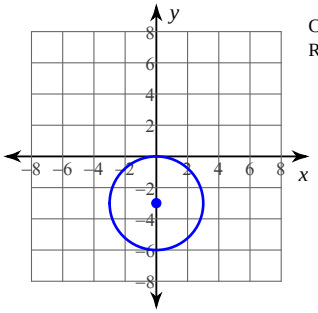
D)



Center: $(2, -3)$
Radius: $\sqrt{6}$

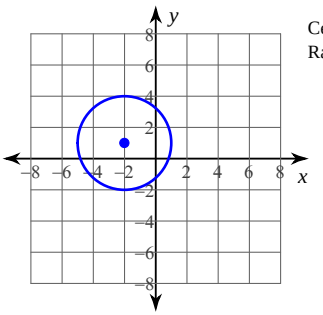
6) $2y + y^2 + 6x = -1 - x^2$

A)



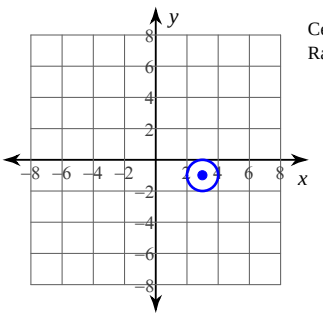
Center: $(0, -3)$
Radius: 3

B)



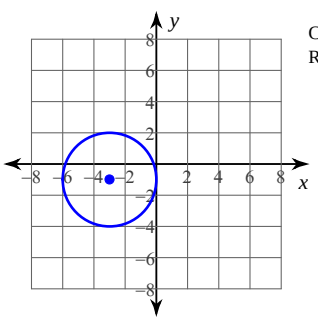
Center: $(-2, 1)$
Radius: 3

C)



Center: $(3, -1)$
Radius: 1

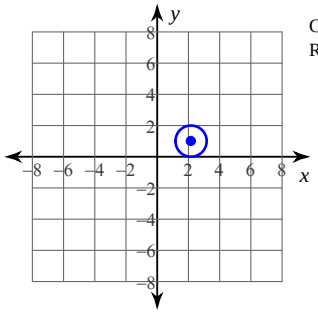
D)



Center: $(-3, -1)$
Radius: 3

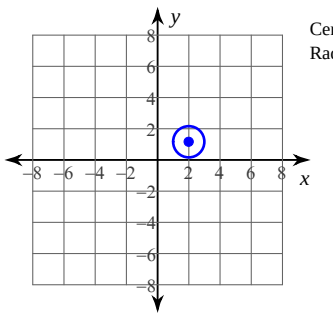
7) $y^2 + 2y + 10 - 2x\sqrt{10} = -x^2$

A)



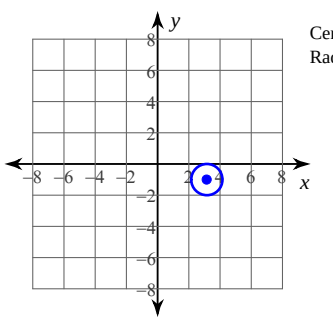
Center: $(\sqrt{10} - 1, 1)$
Radius: 1

B)



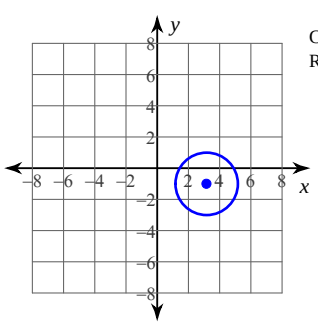
Center: $(2, \sqrt{10} - 2)$
Radius: 1

C)



Center: $(\sqrt{10}, -1)$
Radius: 1

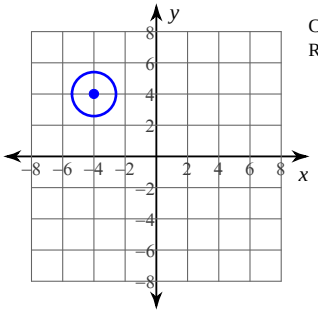
D)



Center: $(\sqrt{10}, -1)$
Radius: 2

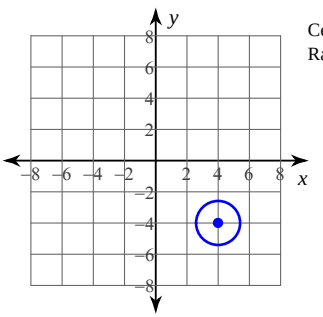
8) $30 + y^2 = 8x - 8y - x^2$

A)



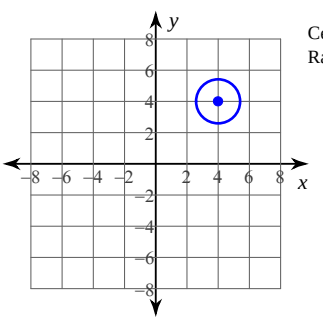
Center: $(-4, 4)$
Radius: $\sqrt{2}$

B)



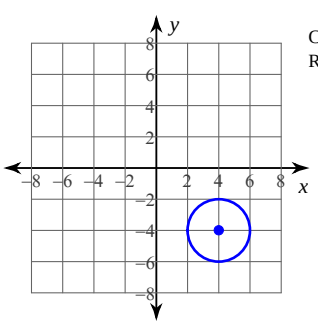
Center: $(4, -4)$
Radius: $\sqrt{2}$

C)



Center: $(4, 4)$
Radius: $\sqrt{2}$

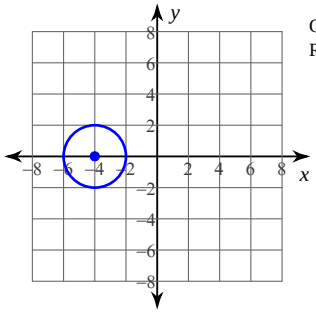
D)



Center: $(4, -4)$
Radius: 2

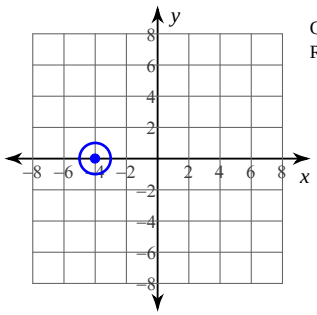
9) $15 + x^2 = -8x - y^2$

A)



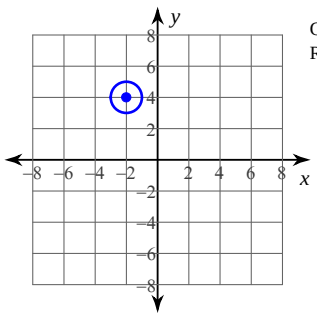
Center: (–4, 0)
Radius: 2

B)



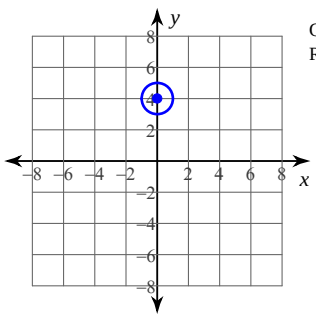
Center: (–4, 0)
Radius: 1

C)



Center: (–2, 4)
Radius: 1

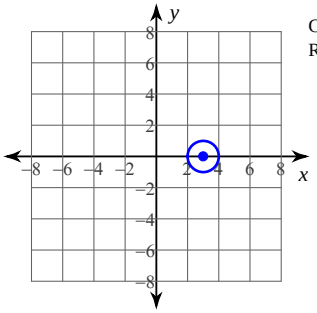
D)



Center: (0, 4)
Radius: 1

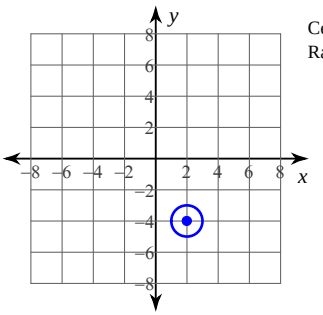
10) $8 + x^2 - 6x = -y^2$

A)



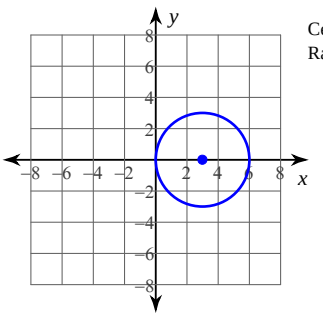
Center: (3, 0)
Radius: 1

B)



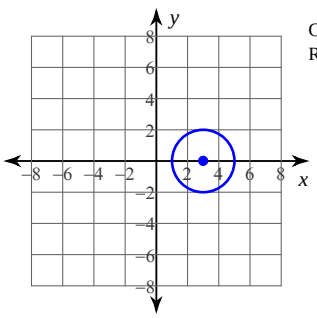
Center: (2, –4)
Radius: 1

C)



Center: (3, 0)
Radius: 3

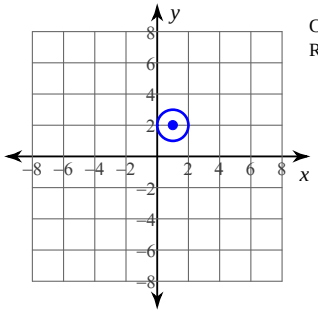
D)



Center: (3, 0)
Radius: 2

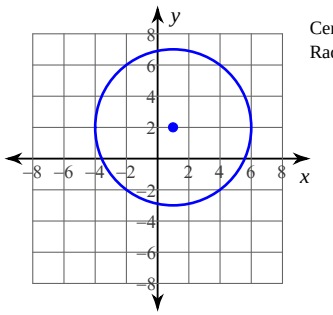
11) $-20 + y^2 + x^2 - 4y = -2x$

A)



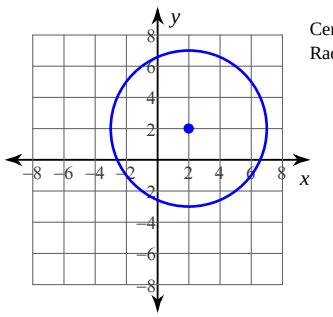
Center: (1, 2)
Radius: 1

B)



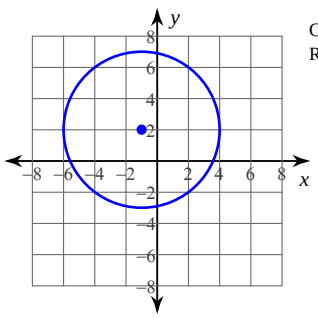
Center: (1, 2)
Radius: 5

C)



Center: (2, 2)
Radius: 5

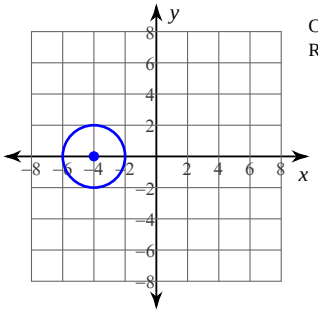
D)



Center: (−1, 2)
Radius: 5

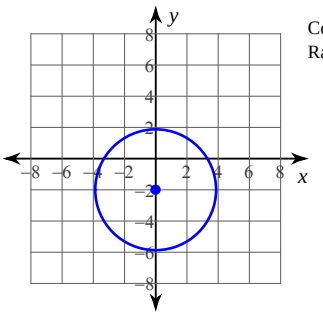
12) $y^2 - 11 + x^2 = 4y$

A)



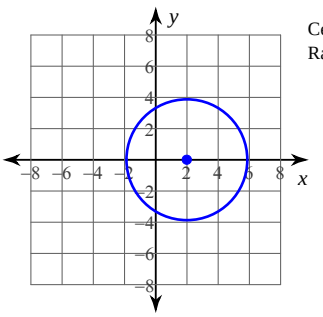
Center: (−4, 0)
Radius: 2

B)



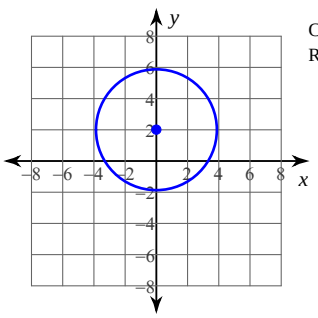
Center: (0, −2)
Radius: $\sqrt{15}$

C)



Center: (2, 0)
Radius: $\sqrt{15}$

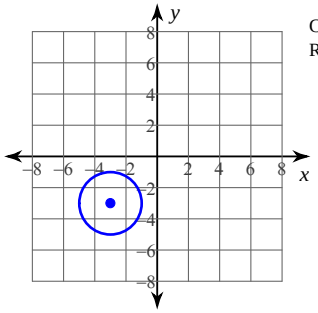
D)



Center: (0, 2)
Radius: $\sqrt{15}$

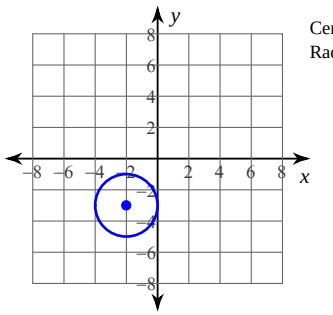
13) $x^2 = -6x + 6y - 14 - y^2$

A)



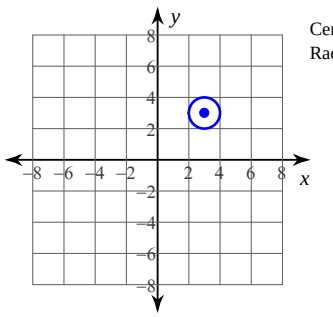
Center: (–3, –3)
Radius: 2

B)



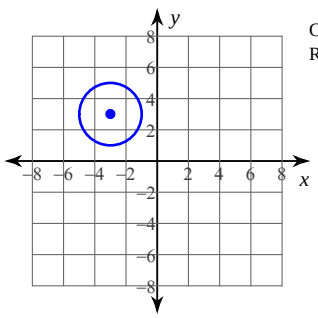
Center: (–2, –3)
Radius: 2

C)



Center: (3, 3)
Radius: 1

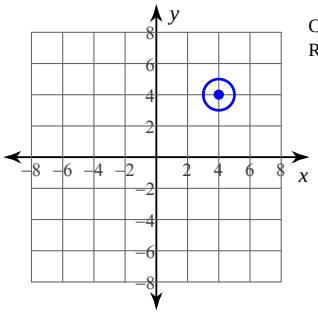
D)



Center: (–3, 3)
Radius: 2

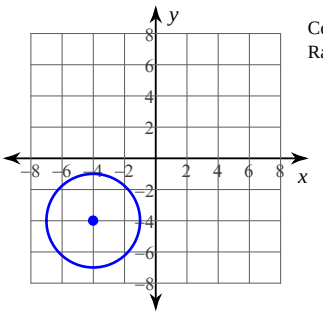
14) $(x-4)^2 + (y-4)^2 = 1$

A)



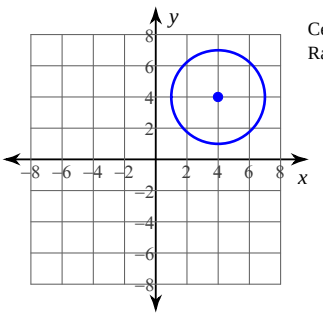
Center: (4, 4)
Radius: 1

B)



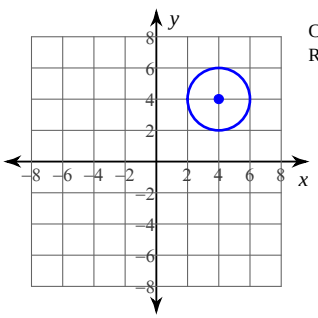
Center: (–4, –4)
Radius: 3

C)



Center: (4, 4)
Radius: 3

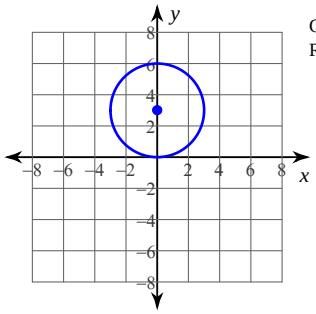
D)



Center: (4, 4)
Radius: 2

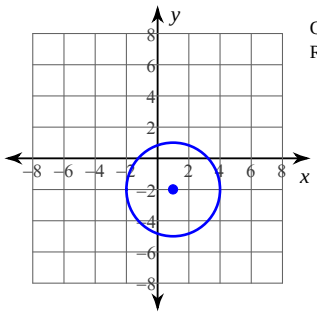
15) $x^2 + (y+3)^2 = 9$

A)



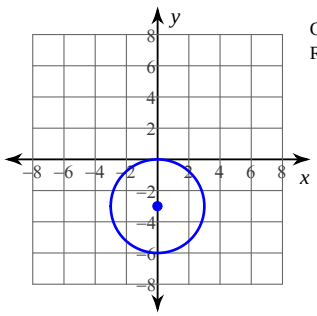
Center: (0, 3)
Radius: 3

B)



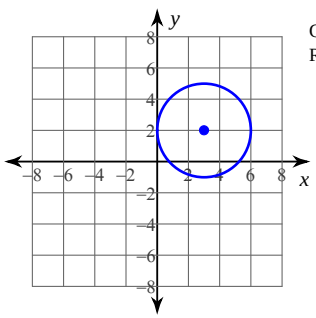
Center: (1, –2)
Radius: 3

C)



Center: (0, –3)
Radius: 3

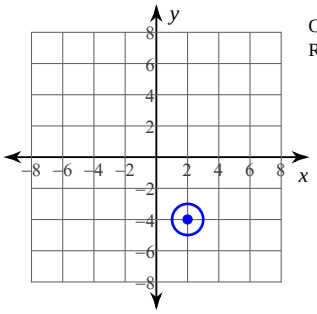
D)



Center: (3, 2)
Radius: 3

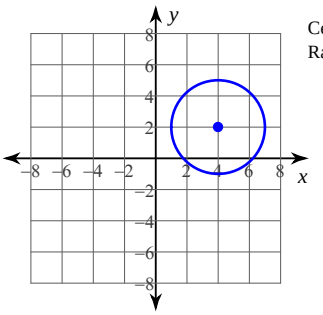
16) $(x-2)^2 + (y+4)^2 = 9$

A)



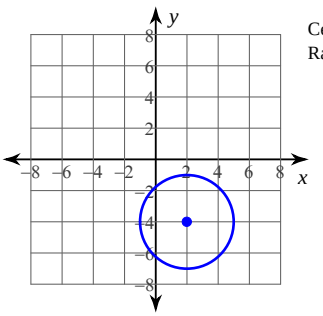
Center: (2, –4)
Radius: 1

B)



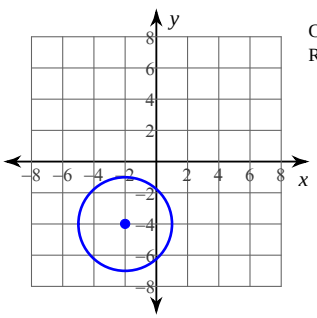
Center: (4, 2)
Radius: 3

C)



Center: (2, –4)
Radius: 3

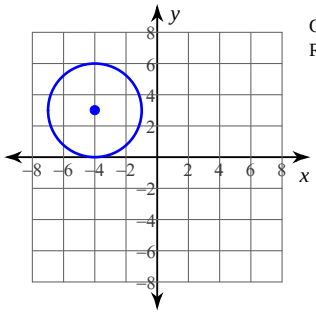
D)



Center: (–2, –4)
Radius: 3

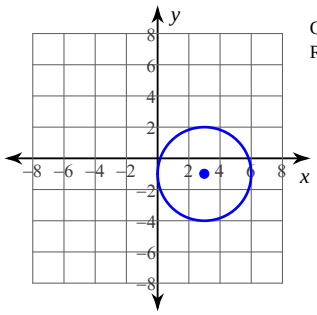
17) $(x+2)^2+(y+2)^2=9$

A)



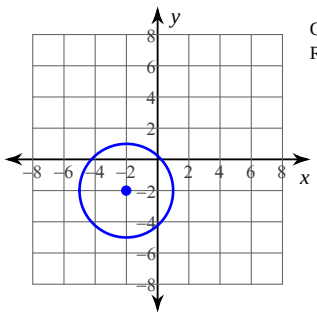
Center: (–4, 3)
Radius: 3

B)



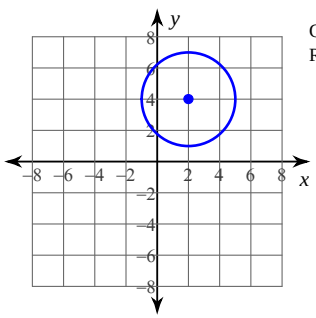
Center: (3, –1)
Radius: 3

C)



Center: (–2, –2)
Radius: 3

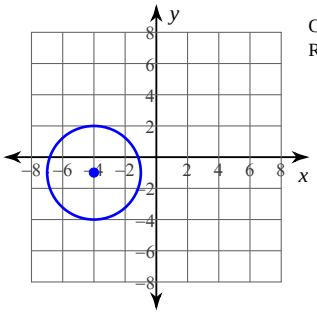
D)



Center: (2, 4)
Radius: 3

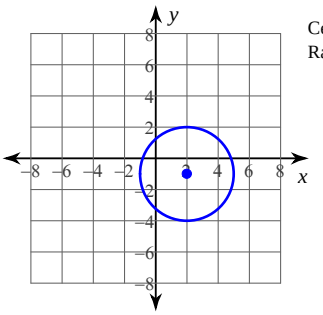
18) $(x+4)^2+(y+1)^2=9$

A)



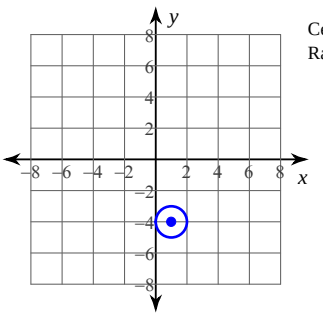
Center: (–4, –1)
Radius: 3

B)



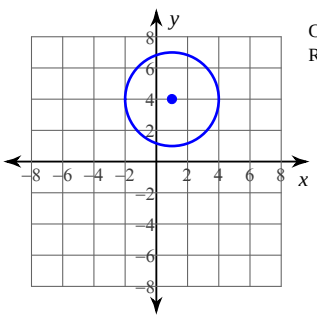
Center: (2, –1)
Radius: 3

C)



Center: (1, –4)
Radius: 1

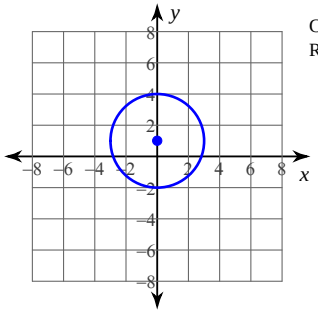
D)



Center: (1, 4)
Radius: 3

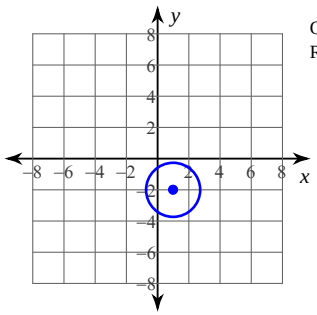
19) $-2y - 2 = -x^2 - y^2$

A)



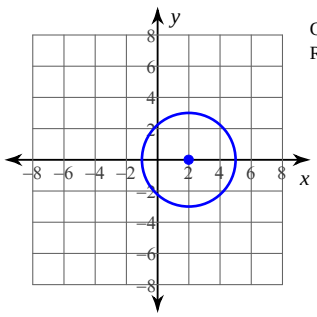
Center: $(0, 1)$
Radius: 3

B)



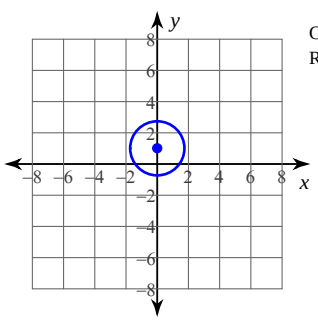
Center: $(1, -2)$
Radius: $\sqrt{3}$

C)



Center: $(2, 0)$
Radius: 3

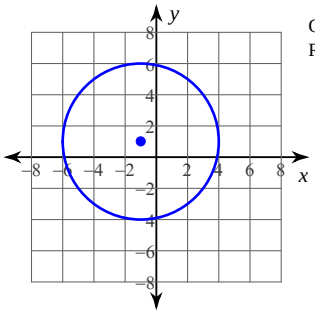
D)



Center: $(0, 1)$
Radius: $\sqrt{3}$

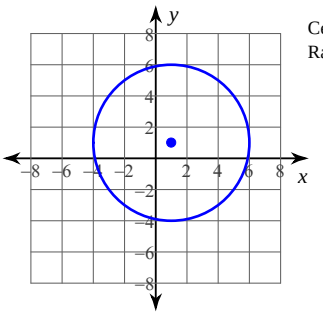
20) $(x-1)^2 + (y-1)^2 = 25$

A)



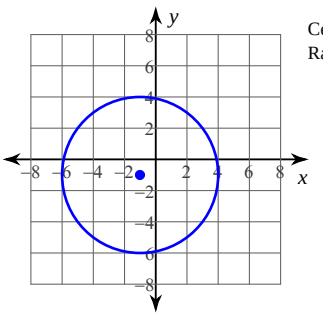
Center: $(-1, 1)$
Radius: 5

B)



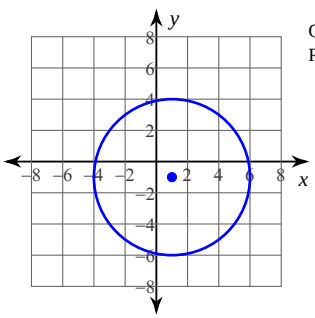
Center: $(1, 1)$
Radius: 5

C)



Center: $(-1, -1)$
Radius: 5

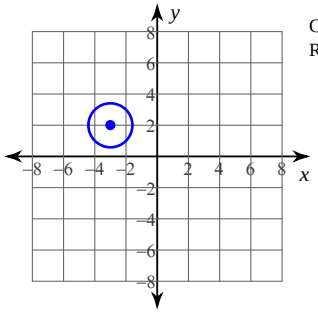
D)



Center: $(1, -1)$
Radius: 5

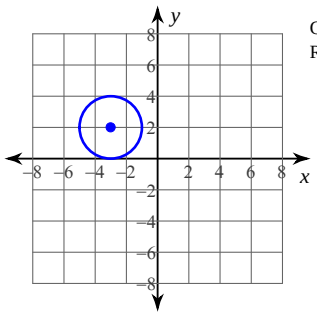
21) $x^2 = -y^2 - 6x - 11 + 4y$

A)



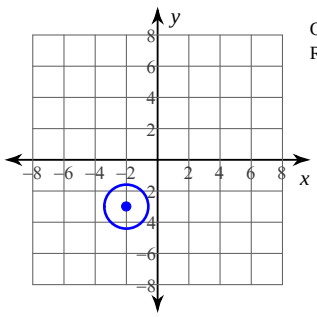
Center: $(-3, 2)$
Radius: $\sqrt{2}$

B)



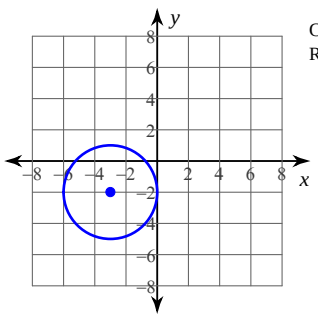
Center: $(-3, 2)$
Radius: 2

C)



Center: $(-2, -3)$
Radius: $\sqrt{2}$

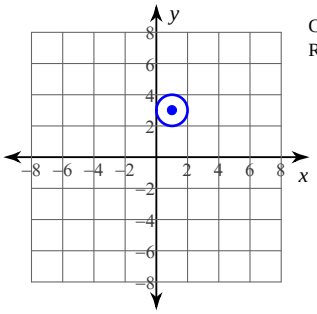
D)



Center: $(-3, -2)$
Radius: 3

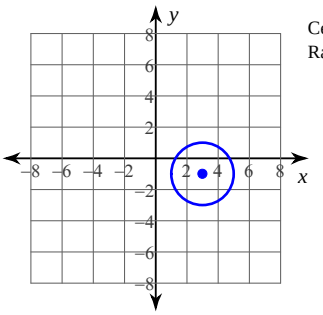
22) $(x-3)^2 + (y+1)^2 = 4$

A)



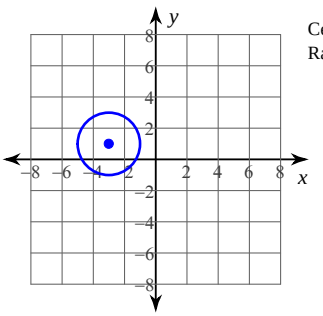
Center: $(1, 3)$
Radius: 1

B)



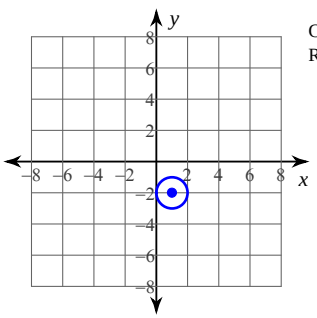
Center: $(3, -1)$
Radius: 2

C)



Center: $(-3, 1)$
Radius: 2

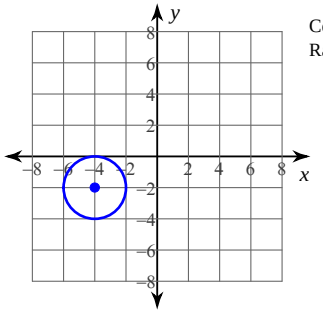
D)



Center: $(1, -2)$
Radius: 1

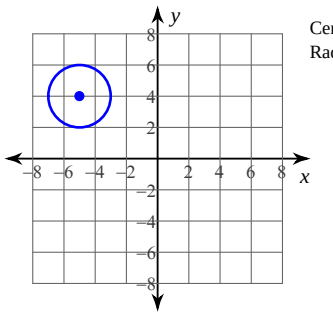
23) $x^2 - 8y + 28 = -y^2 + 8x$

A)



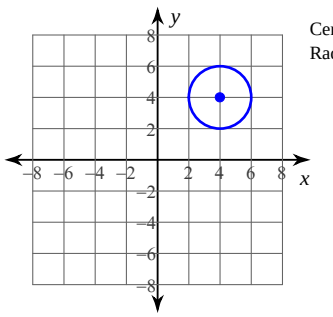
Center: (–4, –2)
Radius: 2

B)



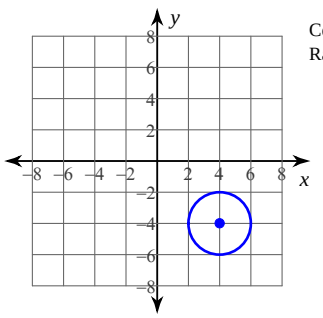
Center: (–5, 4)
Radius: 2

C)



Center: (4, 4)
Radius: 2

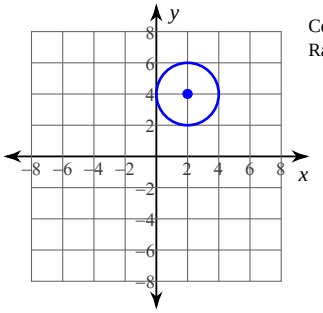
D)



Center: (4, –4)
Radius: 2

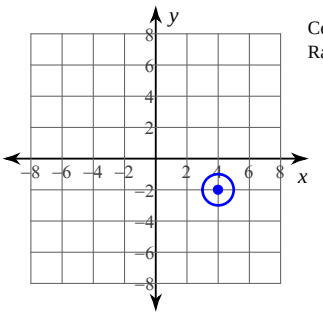
24) $x^2 - 4x = -y^2 - 16 + 8y$

A)



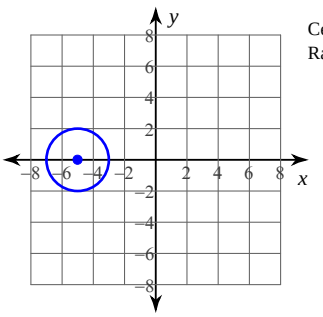
Center: (2, 4)
Radius: 2

B)



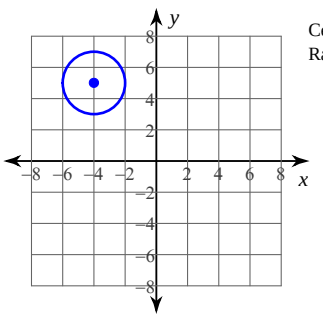
Center: (4, –2)
Radius: 1

C)



Center: (–5, 0)
Radius: 2

D)



Center: (–4, 5)
Radius: 2

Answers to Assignment (ID: 2)

1) C
2) A
3) C
4) B
5) D
6) D
7) C
8) B
9) B
10) A
11) D
12) D
13) D
14) A
15) C
16) C
17) C
18) A
19) D
20) B
21) A
22) B
23) C
24) A

Geometry Name_____

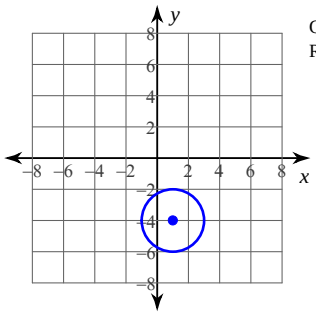
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

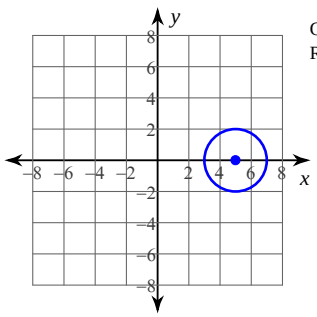
1) $13 + x^2 - 2x = -8y - y^2$

A)



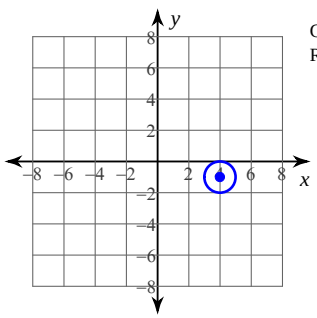
Center: (1, –4)
Radius: 2

B)



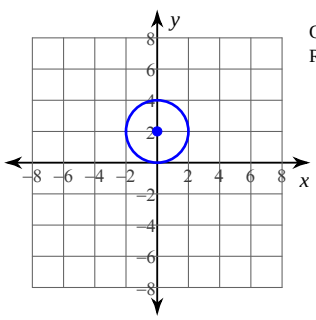
Center: (5, 0)
Radius: 2

C)



Center: (4, –1)
Radius: 1

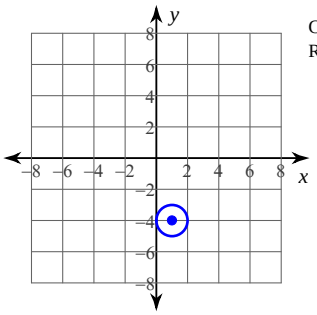
D)



Center: (0, 2)
Radius: 2

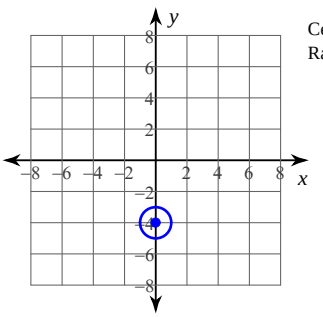
2) $15 + y^2 + x^2 = -8y$

A)



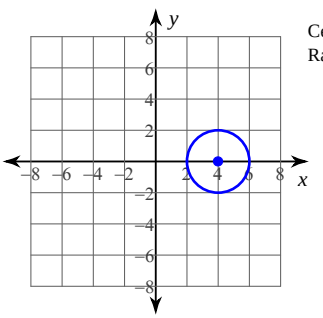
Center: (1, –4)
Radius: 1

B)



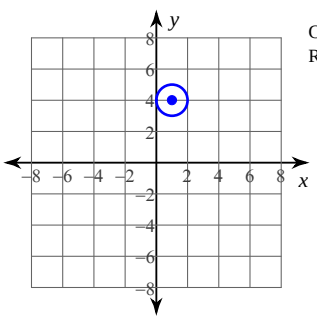
Center: (0, –4)
Radius: 1

C)



Center: (4, 0)
Radius: 2

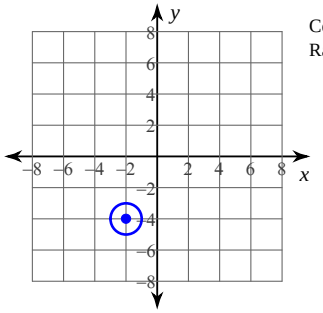
D)



Center: (1, 4)
Radius: 1

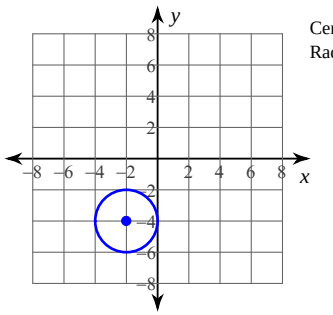
3) $19 + 4x = -y^2 - 8y - x^2$

A)



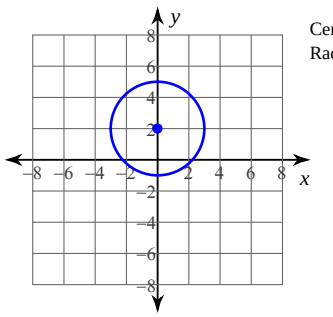
Center: (–2, –4)
Radius: 1

B)



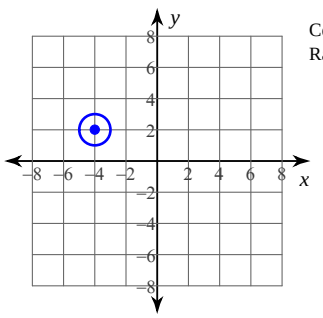
Center: (–2, –4)
Radius: 2

C)



Center: (0, 2)
Radius: 3

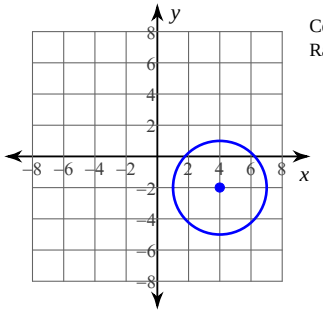
D)



Center: (–4, 2)
Radius: 1

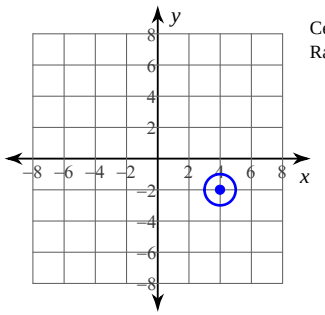
4) $-8x + 19 + 4y = -y^2 - x^2$

A)



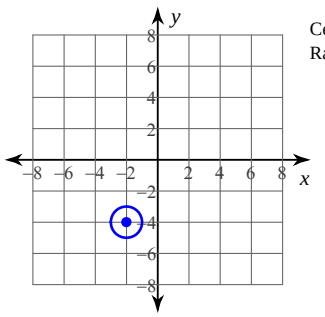
Center: (4, –2)
Radius: 3

B)



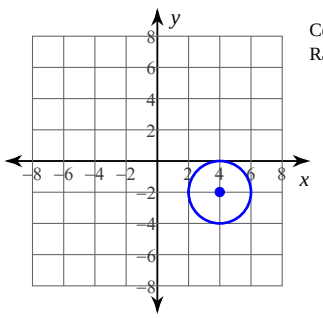
Center: (4, –2)
Radius: 1

C)



Center: (–2, –4)
Radius: 1

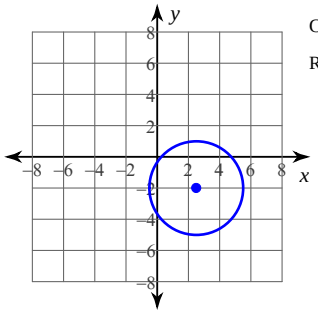
D)



Center: (4, –2)
Radius: 2

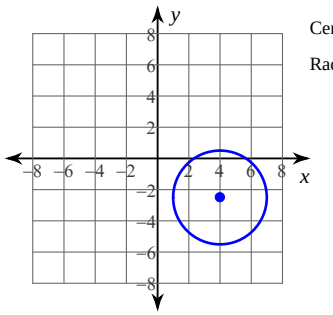
5) $4x^2 = -53 + 32x - 20y - 4y^2$

A)



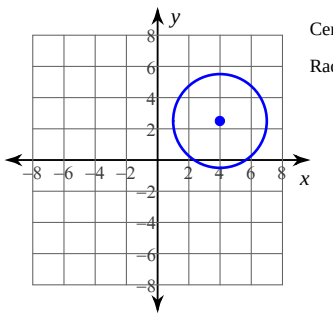
Center: $\left(\frac{5}{2}, -2\right)$
Radius: 3

B)



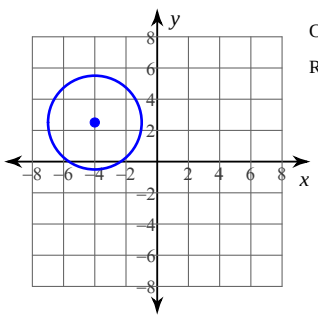
Center: $\left(4, -\frac{5}{2}\right)$
Radius: 3

C)



Center: $\left(4, \frac{5}{2}\right)$
Radius: 3

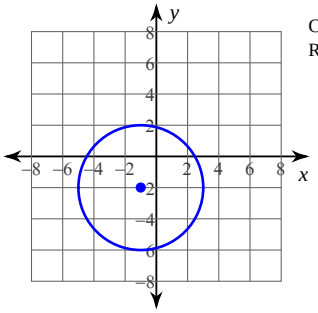
D)



Center: $\left(-4, \frac{5}{2}\right)$
Radius: 3

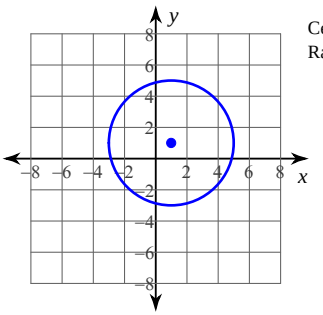
6) $2x - 2y + y^2 + x^2 = 14$

A)



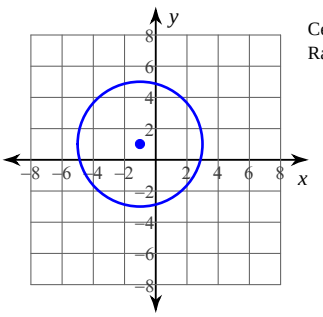
Center: $(-1, -2)$
Radius: 4

B)



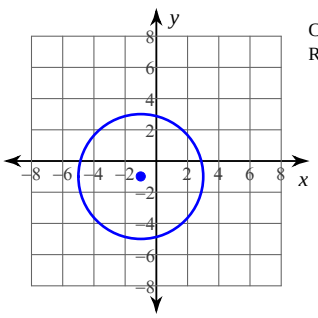
Center: $(1, 1)$
Radius: 4

C)



Center: $(-1, 1)$
Radius: 4

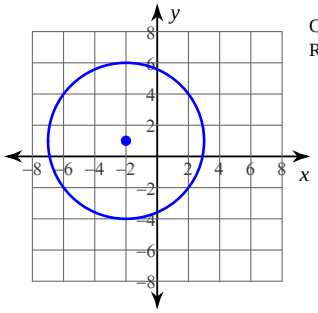
D)



Center: $(-1, -1)$
Radius: 4

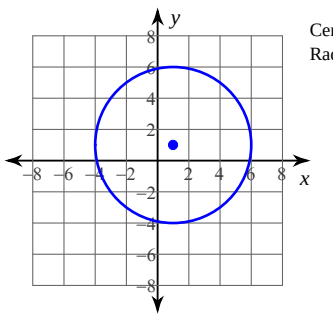
7) $-2y = -4x - y^2 + 20 - x^2$

A)



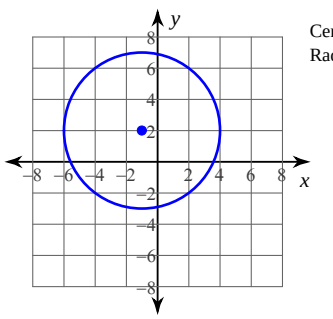
Center: (–2, 1)
Radius: 5

B)



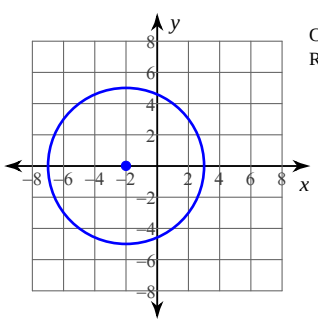
Center: (1, 1)
Radius: 5

C)



Center: (–1, 2)
Radius: 5

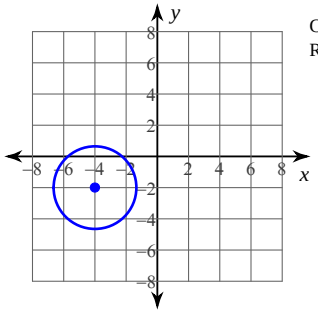
D)



Center: (–2, 0)
Radius: 5

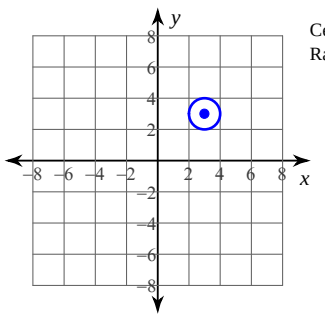
8) $0 = -13 - x^2 - y^2 + 4y - 8x$

A)



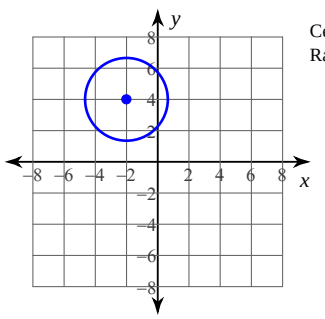
Center: (–4, –2)
Radius: $\sqrt{7}$

B)



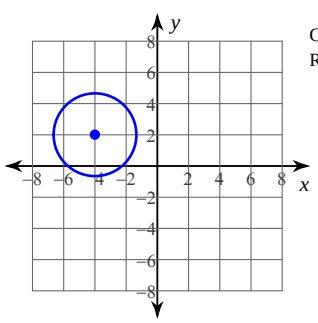
Center: (3, 3)
Radius: 1

C)



Center: (–2, 4)
Radius: $\sqrt{7}$

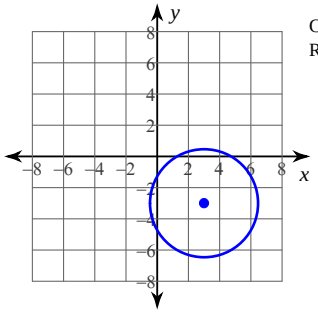
D)



Center: (–4, 2)
Radius: $\sqrt{7}$

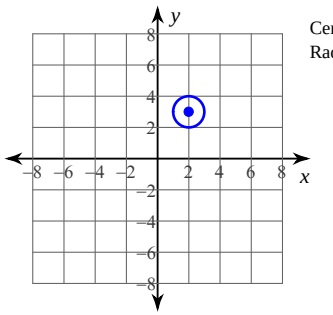
9) $-4x + x^2 + 1 - 6y = -y^2$

A)



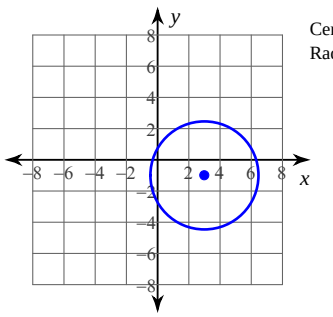
Center: $(3, -3)$
Radius: $2\sqrt{3}$

B)



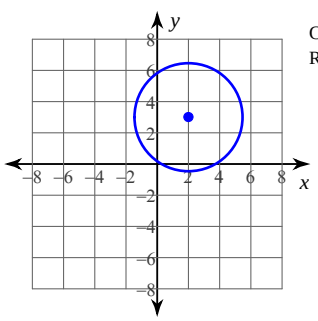
Center: $(2, 3)$
Radius: 1

C)



Center: $(3, -1)$
Radius: $2\sqrt{3}$

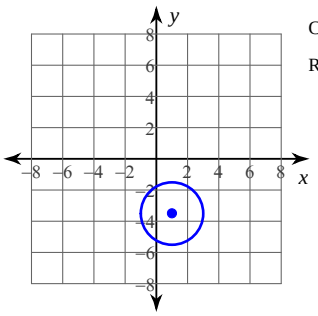
D)



Center: $(2, 3)$
Radius: $2\sqrt{3}$

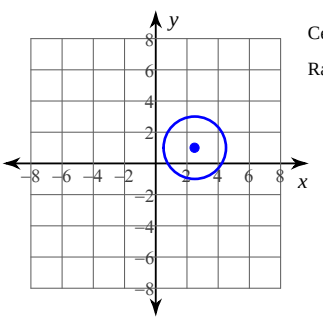
10) $37 = -28y + 8x - 4x^2 - 4y^2$

A)



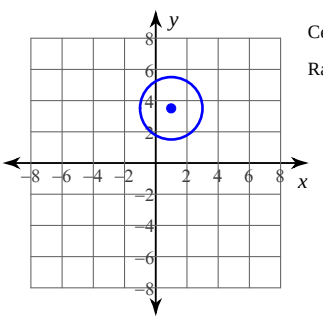
Center: $\left(1, -\frac{7}{2}\right)$
Radius: 2

B)



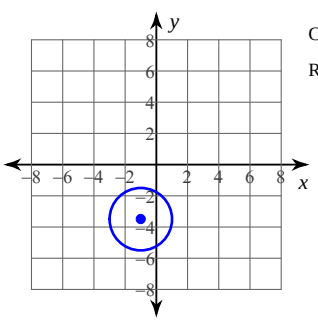
Center: $\left(\frac{5}{2}, 1\right)$
Radius: 2

C)



Center: $\left(1, \frac{7}{2}\right)$
Radius: 2

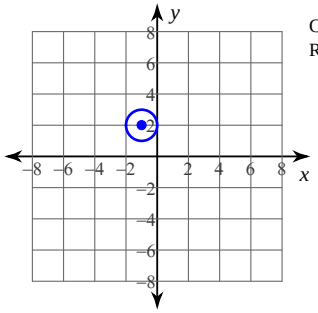
D)



Center: $\left(-1, -\frac{7}{2}\right)$
Radius: 2

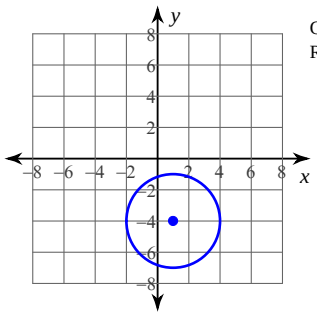
11) $2x + y^2 + 8 - 8y = -x^2$

A)



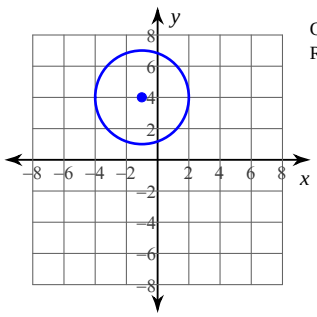
Center: (–1, 2)
Radius: 1

B)



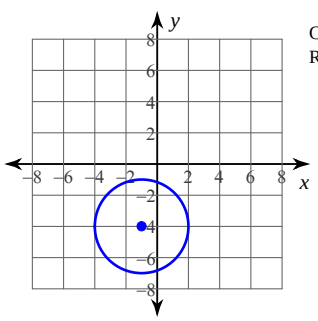
Center: (1, –4)
Radius: 3

C)



Center: (–1, 4)
Radius: 3

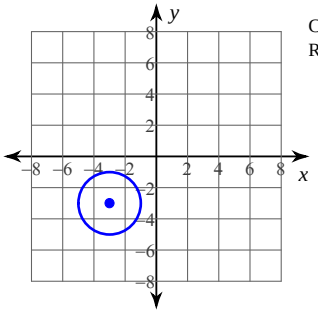
D)



Center: (–1, –4)
Radius: 3

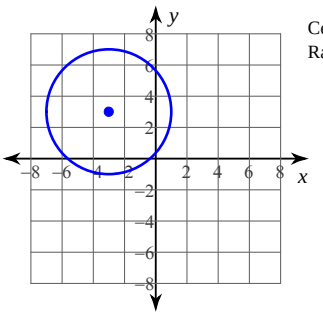
12) $6y = -x^2 - 14 - 6x - y^2$

A)



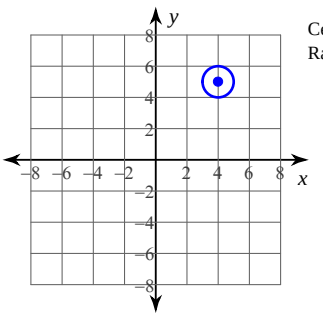
Center: (–3, –3)
Radius: 2

B)



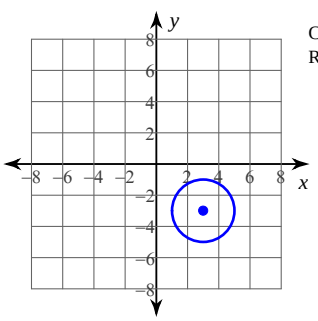
Center: (–3, 3)
Radius: 4

C)



Center: (4, 5)
Radius: 1

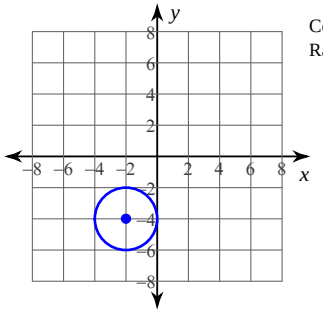
D)



Center: (3, –3)
Radius: 2

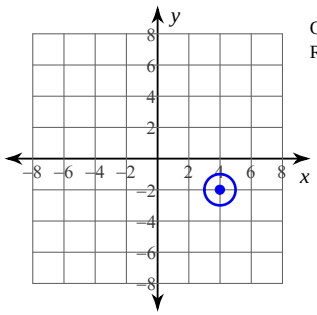
13) $-8x + 16 + 4y = -y^2 - x^2$

A)



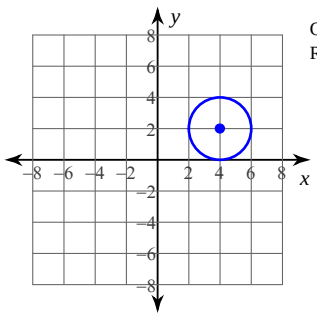
Center: (–2, –4)
Radius: 2

B)



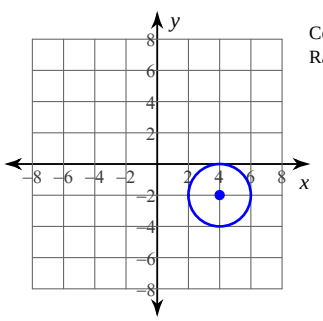
Center: (4, –2)
Radius: 1

C)



Center: (4, 2)
Radius: 2

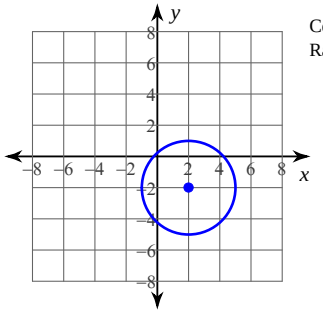
D)



Center: (4, –2)
Radius: 2

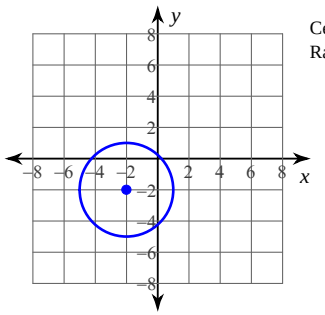
14) $4y - 1 + y^2 = -x^2 + 4x$

A)



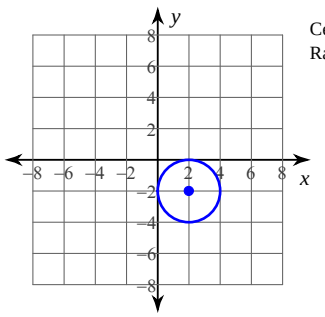
Center: (2, –2)
Radius: 3

B)



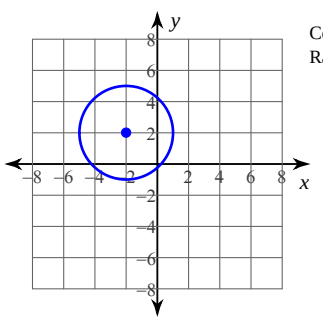
Center: (–2, –2)
Radius: 3

C)



Center: (2, –2)
Radius: 2

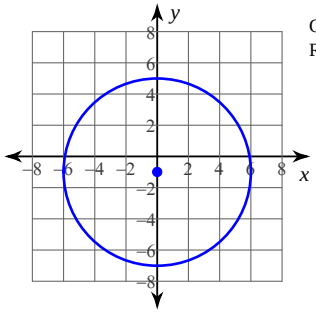
D)



Center: (–2, 2)
Radius: 3

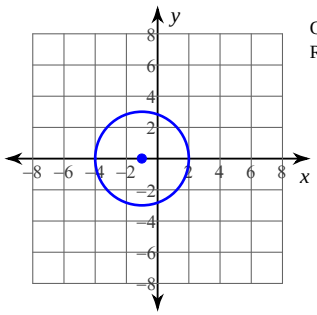
15) $2x + y^2 = -x^2 + 35$

A)



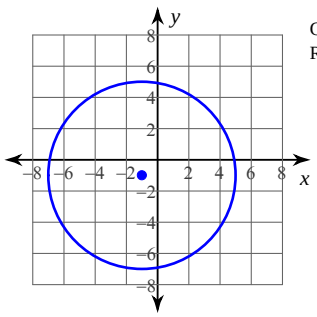
Center: (0, –1)
Radius: 6

B)



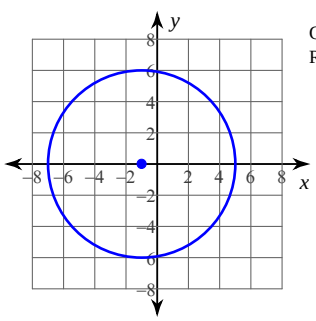
Center: (–1, 0)
Radius: 3

C)



Center: (–1, –1)
Radius: 6

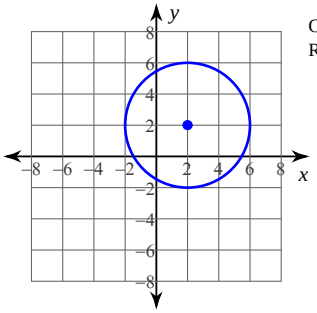
D)



Center: (–1, 0)
Radius: 6

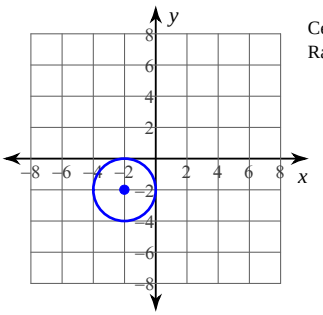
16) $-4y + x^2 - 4x = -4 - y^2$

A)



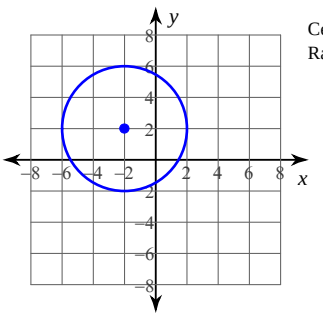
Center: (2, 2)
Radius: 4

B)



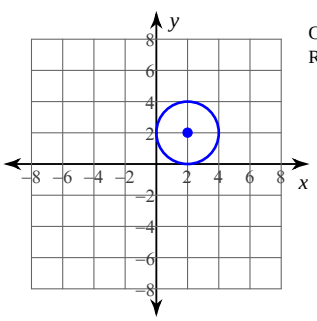
Center: (–2, –2)
Radius: 2

C)



Center: (–2, 2)
Radius: 4

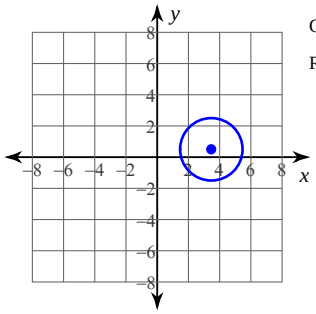
D)



Center: (2, 2)
Radius: 2

17) $-16x\sqrt{3} - 4y = -4x^2 - 13 - 4y^2$

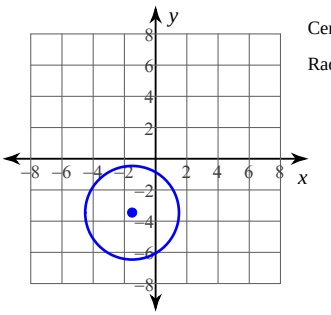
A)



Center: $\left(2\sqrt{3}, \frac{1}{2}\right)$

Radius: 2

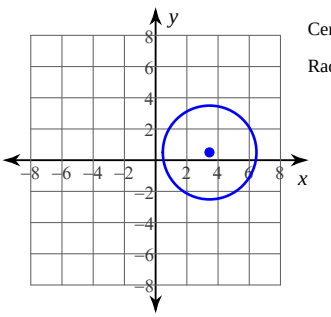
B)



Center: $\left(-\frac{3}{2}, -2\sqrt{3}\right)$

Radius: 3

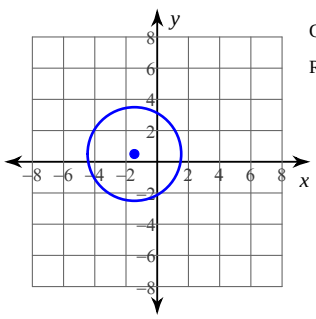
C)



Center: $\left(2\sqrt{3}, \frac{1}{2}\right)$

Radius: 3

D)

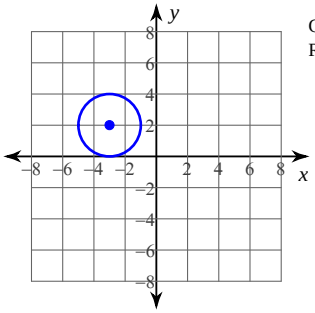


Center: $\left(-2\sqrt{3} + 2, \frac{1}{2}\right)$

Radius: 3

18) $9 + y^2 = 6x - x^2 + 4y$

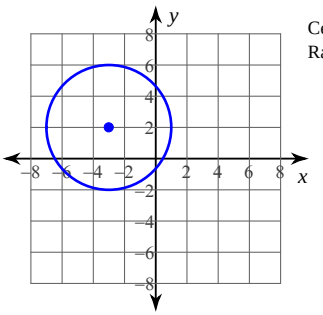
A)



Center: $(-3, 2)$

Radius: 2

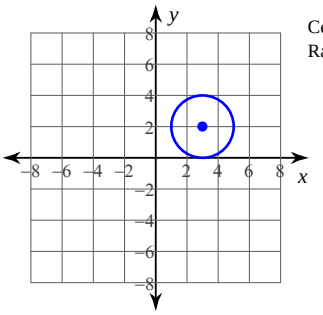
B)



Center: $(-3, 2)$

Radius: 4

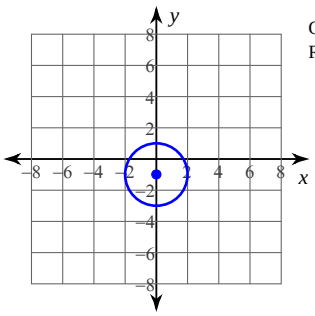
C)



Center: $(3, 2)$

Radius: 2

D)

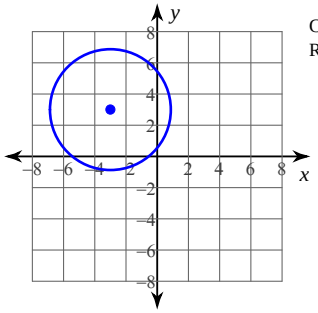


Center: $(0, -1)$

Radius: 2

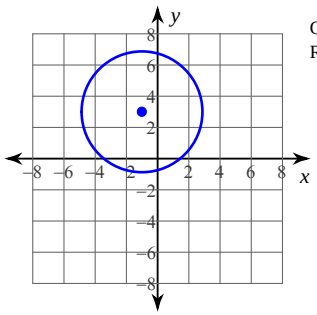
19) $y^2 - 2x = 6y + 5 - x^2$

A)



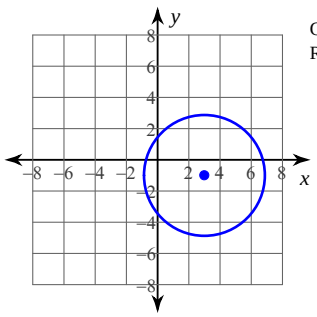
Center: $(-3, 3)$
Radius: $\sqrt{15}$

B)



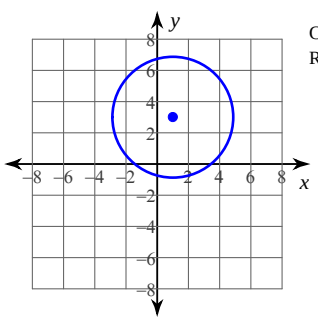
Center: $(-1, 3)$
Radius: $\sqrt{15}$

C)



Center: $(3, -1)$
Radius: $\sqrt{15}$

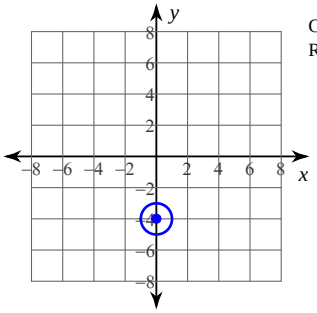
D)



Center: $(1, 3)$
Radius: $\sqrt{15}$

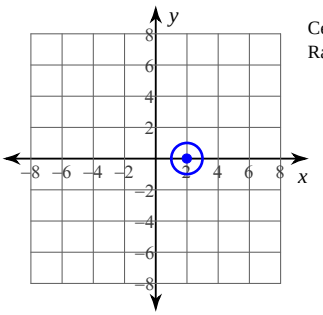
20) $x^2 + 11 + y^2 = 8y$

A)



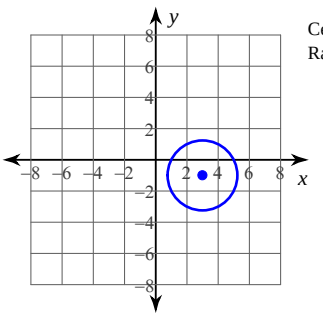
Center: $(0, -4)$
Radius: 1

B)



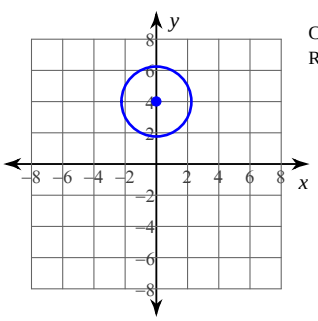
Center: $(2, 0)$
Radius: 1

C)



Center: $(3, -1)$
Radius: $\sqrt{5}$

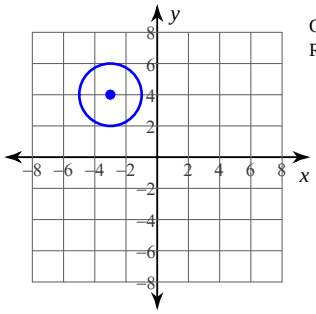
D)



Center: $(0, 4)$
Radius: $\sqrt{5}$

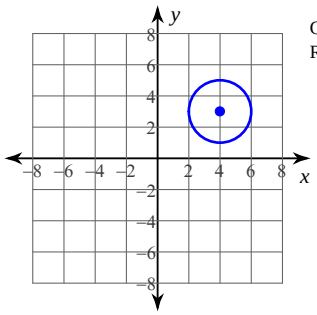
21) $(x+3)^2+(y-4)^2=4$

A)



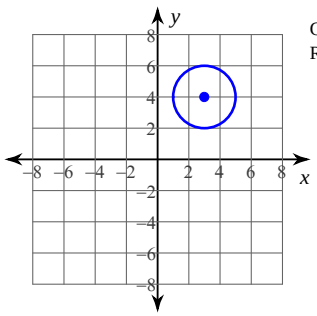
Center: (–3, 4)
Radius: 2

B)



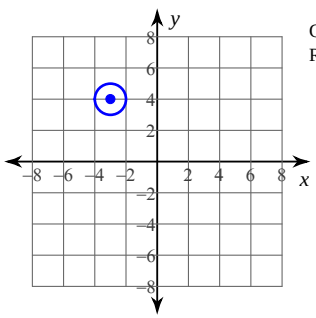
Center: (4, 3)
Radius: 2

C)



Center: (3, 4)
Radius: 2

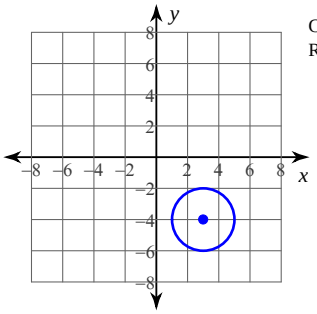
D)



Center: (–3, 4)
Radius: 1

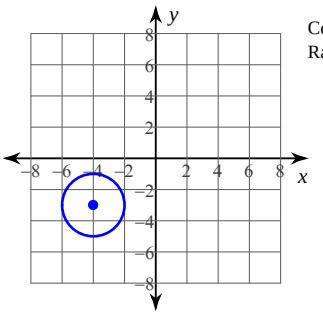
22) $(x-4)^2+(y+3)^2=4$

A)



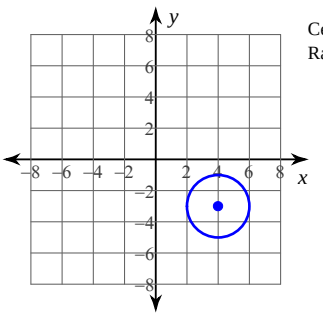
Center: (3, –4)
Radius: 2

B)



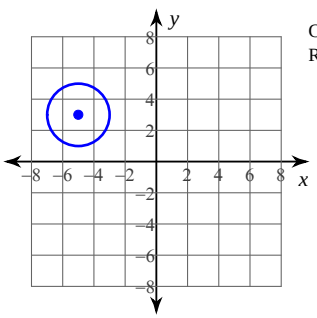
Center: (–4, –3)
Radius: 2

C)



Center: (4, –3)
Radius: 2

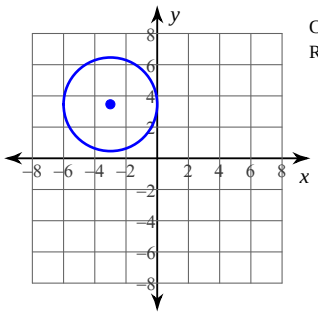
D)



Center: (–5, 3)
Radius: 2

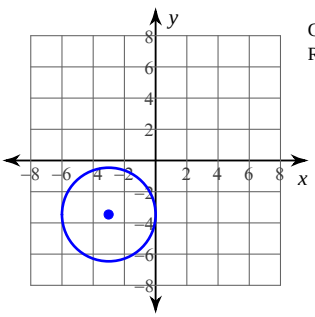
23) $(x-3)^2+(y-2\sqrt{3})^2=9$

A)



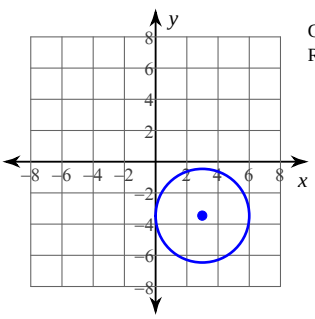
Center: $(-3, 2\sqrt{3})$
Radius: 3

B)



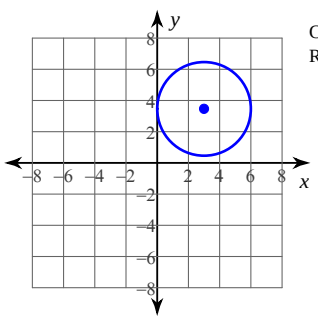
Center: $(-3, -2\sqrt{3})$
Radius: 3

C)



Center: $(3, -2\sqrt{3})$
Radius: 3

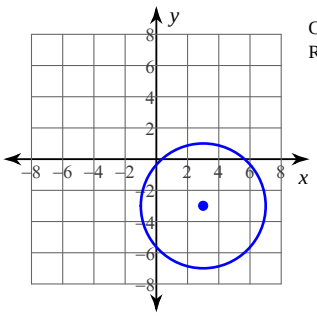
D)



Center: $(3, 2\sqrt{3})$
Radius: 3

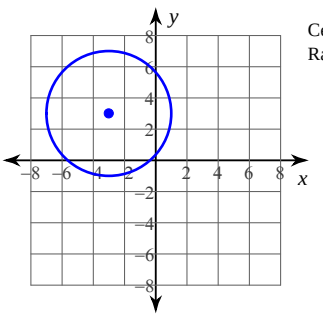
24) $(x-3)^2+(y+3)^2=16$

A)



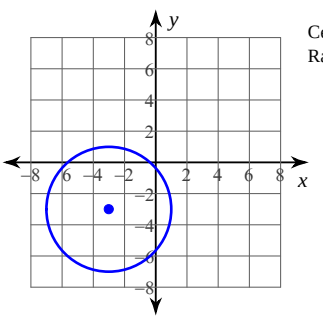
Center: $(3, -3)$
Radius: 4

B)



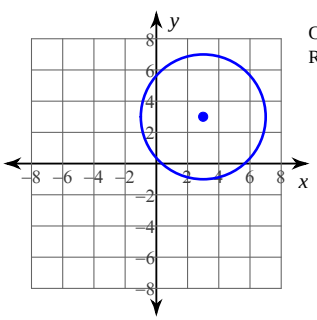
Center: $(-3, 3)$
Radius: 4

C)



Center: $(-3, -3)$
Radius: 4

D)



Center: $(3, 3)$
Radius: 4

Answers to Assignment (ID: 3)

1) A
2) B
3) A
4) B
5) B
6) C
7) A
8) D
9) D
10) A
11) C
12) A
13) D
14) A
15) D
16) D
17) C
18) C
19) D
20) D
21) A
22) C
23) D
24) A

Geometry Name_____

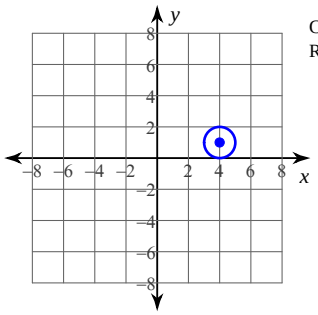
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

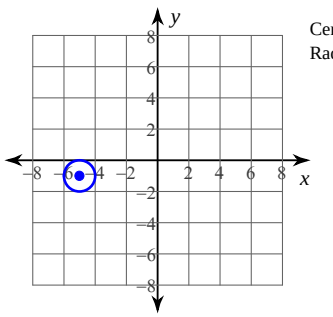
1) $x^2 - 2y - 8x + 16 = -y^2$

A)



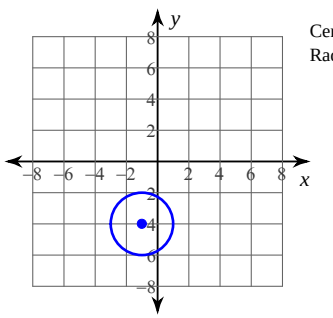
Center: (4, 1)
Radius: 1

B)



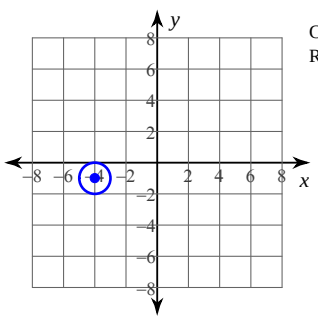
Center: (−5, −1)
Radius: 1

C)



Center: (−1, −4)
Radius: 2

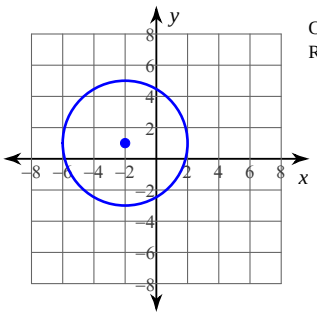
D)



Center: (−4, −1)
Radius: 1

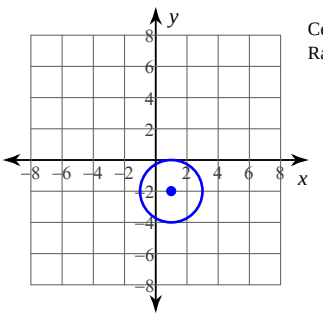
2) $(x+2)^2 + (y+1)^2 = 16$

A)



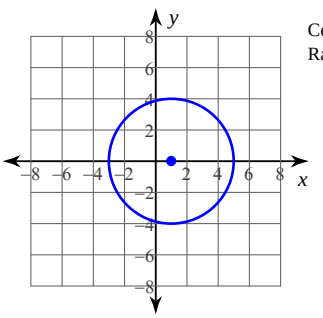
Center: (−2, 1)
Radius: 4

B)



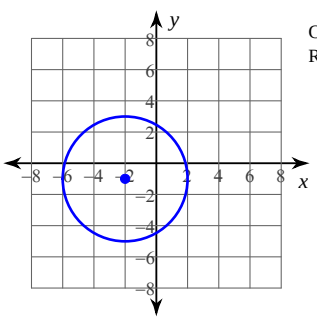
Center: (1, −2)
Radius: 2

C)



Center: (1, 0)
Radius: 4

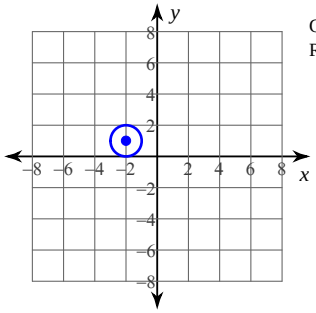
D)



Center: (−2, −1)
Radius: 4

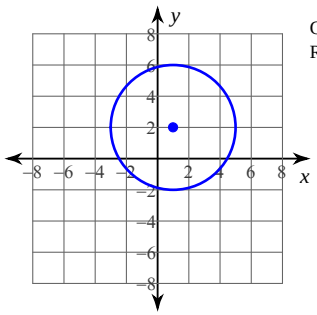
3) $1 - 4y - 2x = -y^2 - x^2$

A)



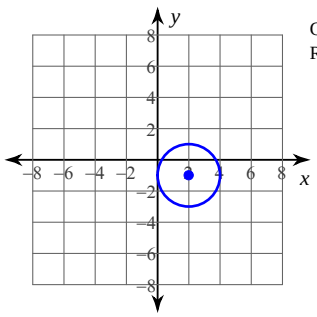
Center: (–2, 1)
Radius: 1

B)



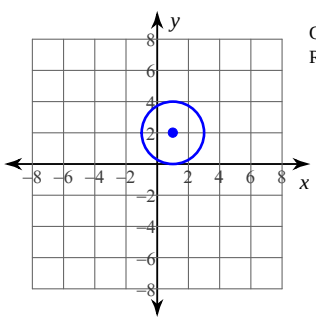
Center: (1, 2)
Radius: 4

C)



Center: (2, –1)
Radius: 2

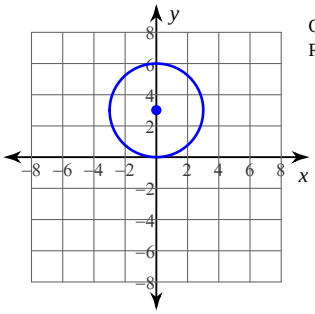
D)



Center: (1, 2)
Radius: 2

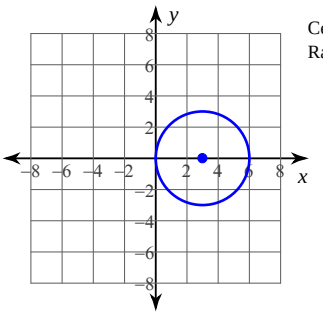
4) $(x + 3)^2 + y^2 = 9$

A)



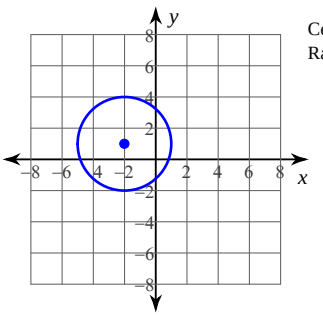
Center: (0, 3)
Radius: 3

B)



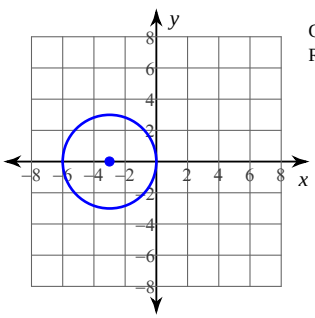
Center: (3, 0)
Radius: 3

C)



Center: (–2, 1)
Radius: 3

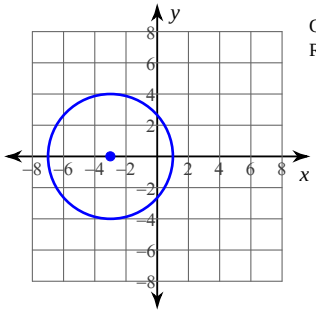
D)



Center: (–3, 0)
Radius: 3

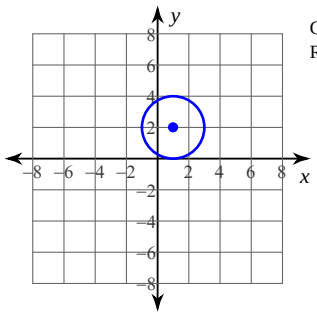
5) $y^2 + x^2 = 6y - 5$

A)



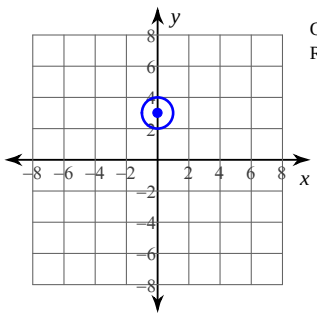
Center: (–3, 0)
Radius: 4

B)



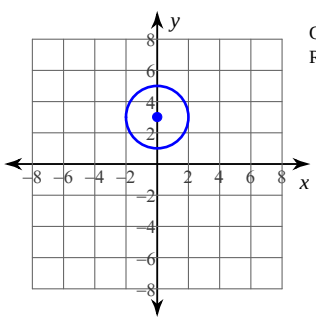
Center: (1, 2)
Radius: 2

C)



Center: (0, 3)
Radius: 1

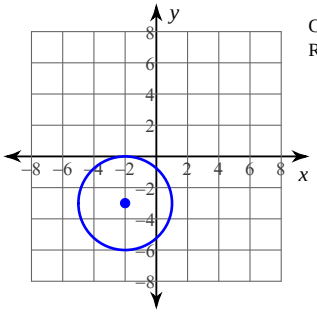
D)



Center: (0, 3)
Radius: 2

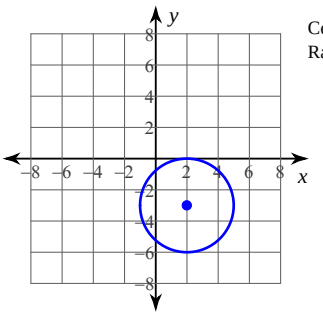
6) $y^2 + 4x - 6y = -4 - x^2$

A)



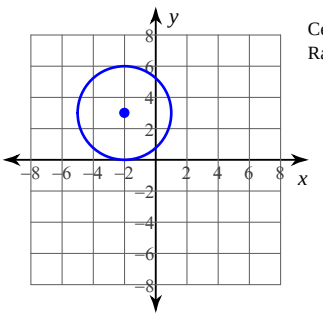
Center: (–2, –3)
Radius: 3

B)



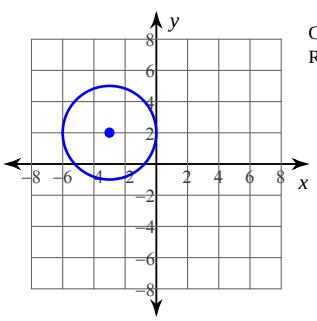
Center: (2, –3)
Radius: 3

C)



Center: (–2, 3)
Radius: 3

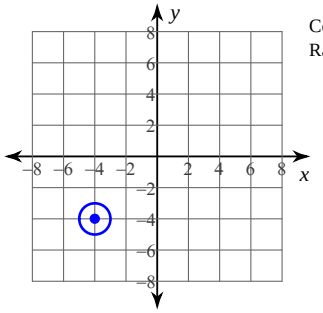
D)



Center: (–3, 2)
Radius: 3

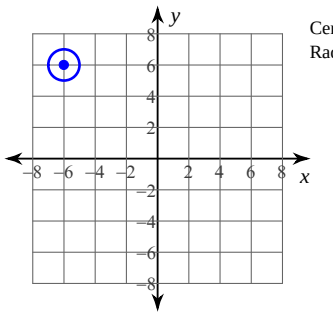
7) $8x + 8y = -31 - y^2 - x^2$

A)



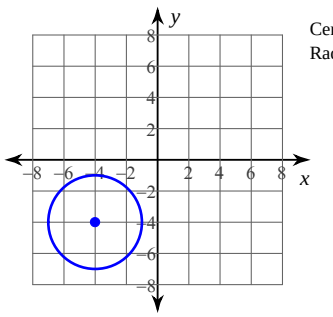
Center: (–4, –4)
Radius: 1

B)



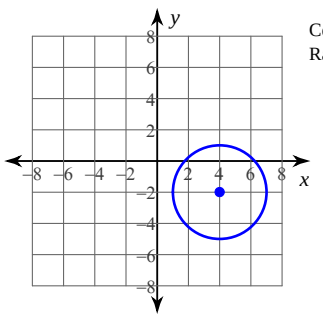
Center: (–6, 6)
Radius: 1

C)



Center: (–4, –4)
Radius: 3

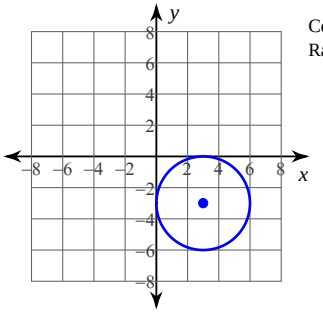
D)



Center: (4, –2)
Radius: 3

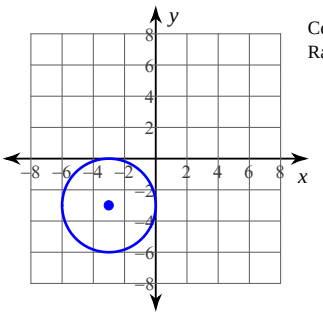
8) $9 + y^2 = -x^2 - 6y + 6x$

A)



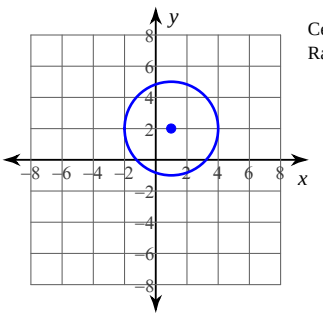
Center: (3, –3)
Radius: 3

B)



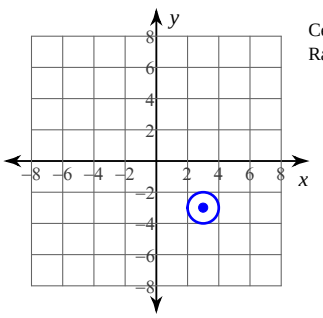
Center: (–3, –3)
Radius: 3

C)



Center: (1, 2)
Radius: 3

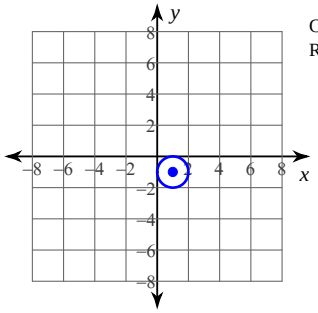
D)



Center: (3, –3)
Radius: 1

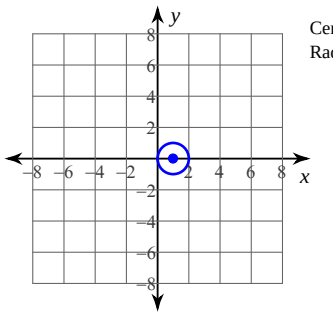
9) $9 + y^2 - 2x = -6y - x^2$

A)



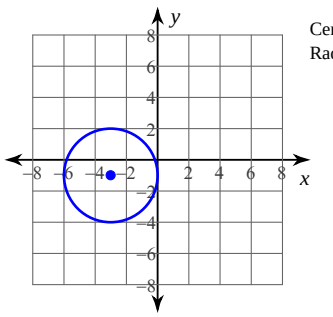
Center: (1, –1)
Radius: 1

B)



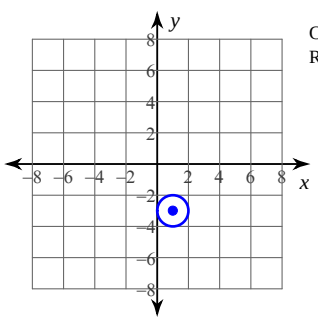
Center: (1, 0)
Radius: 1

C)



Center: (–3, –1)
Radius: 3

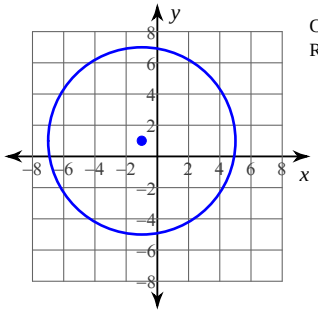
D)



Center: (1, –3)
Radius: 1

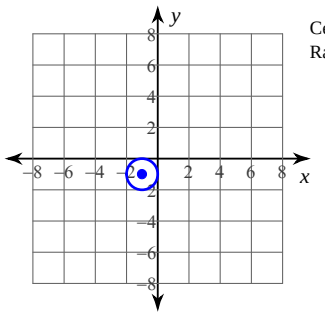
10) $2x + 2y - 34 = -x^2 - y^2$

A)



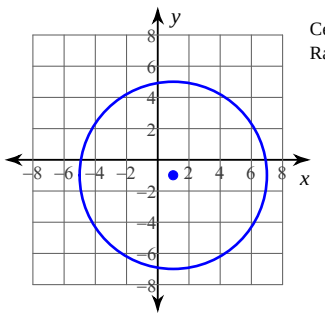
Center: (–1, 1)
Radius: 6

B)



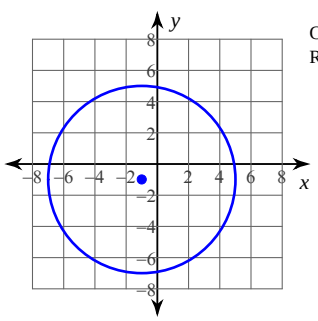
Center: (–1, –1)
Radius: 1

C)



Center: (1, –1)
Radius: 6

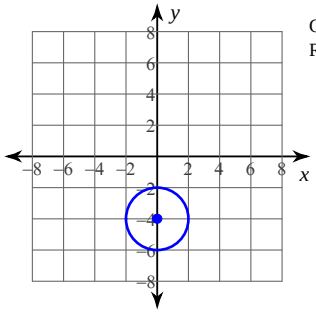
D)



Center: (–1, –1)
Radius: 6

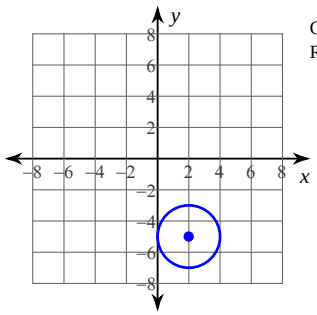
11) $-8x + 12 + y^2 = -x^2$

A)



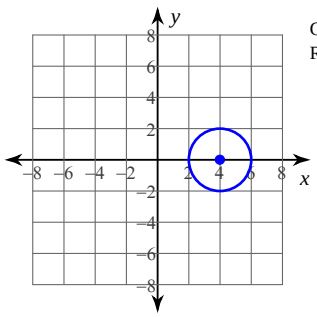
Center: $(0, -4)$
Radius: 2

B)



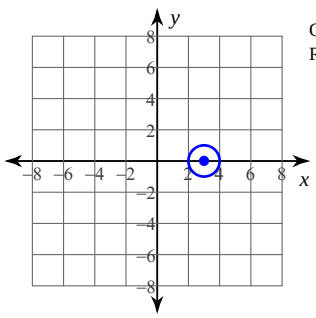
Center: $(2, -5)$
Radius: 2

C)



Center: $(4, 0)$
Radius: 2

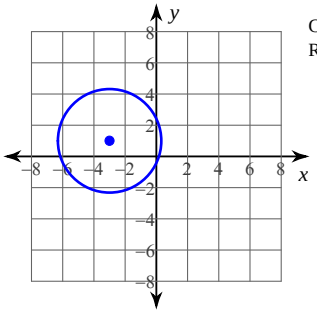
D)



Center: $(3, 0)$
Radius: 1

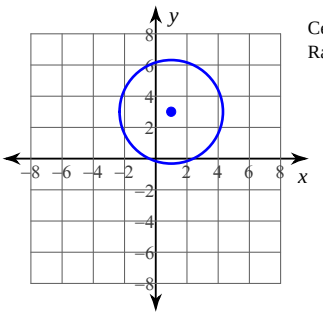
12) $2y + y^2 = 1 - x^2 - 6x$

A)



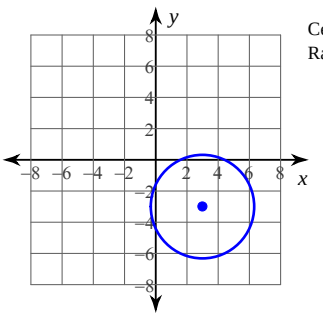
Center: $(-3, 1)$
Radius: $\sqrt{11}$

B)



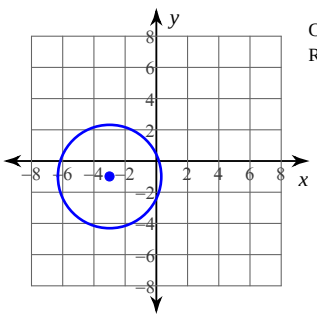
Center: $(1, 3)$
Radius: $\sqrt{11}$

C)



Center: $(3, -3)$
Radius: $\sqrt{11}$

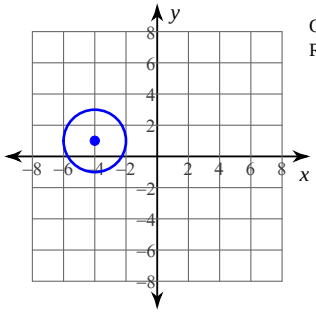
D)



Center: $(-3, -1)$
Radius: $\sqrt{11}$

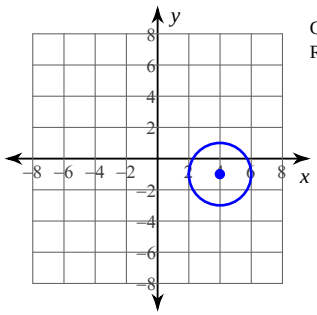
13) $y^2 + x^2 - 8x + 13 = -2y$

A)



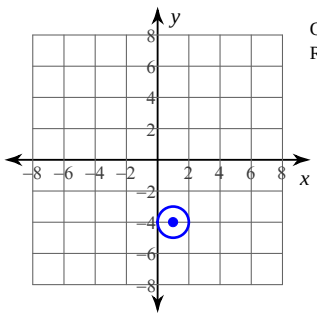
Center: (−4, 1)
Radius: 2

B)



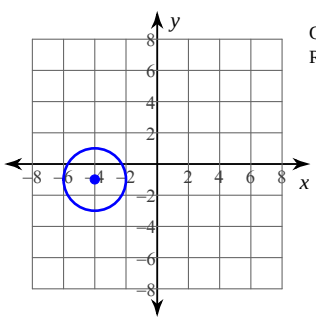
Center: (4, −1)
Radius: 2

C)



Center: (1, −4)
Radius: 1

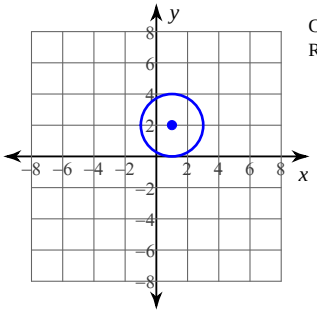
D)



Center: (−4, −1)
Radius: 2

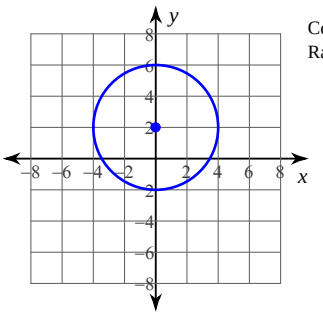
14) $y^2 = -x^2 + 4y$

A)



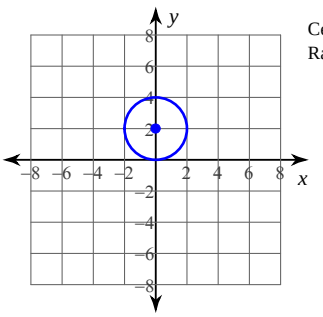
Center: (1, 2)
Radius: 2

B)



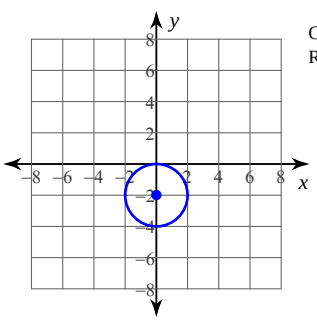
Center: (0, 2)
Radius: 4

C)



Center: (0, 2)
Radius: 2

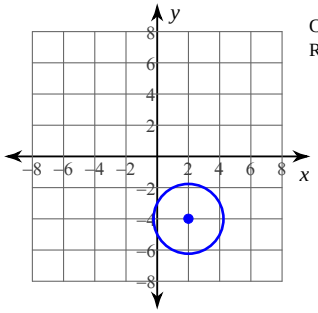
D)



Center: (0, −2)
Radius: 2

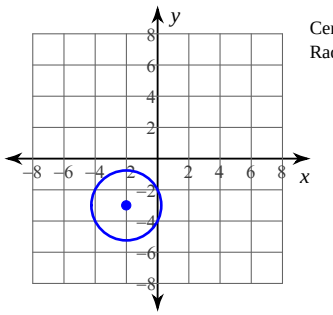
15) $y^2 + x^2 = -8y + 4x - 15$

A)



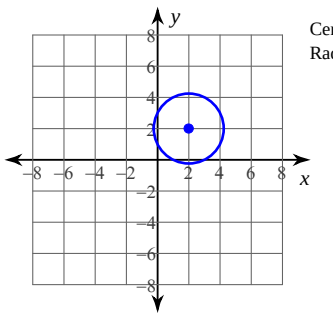
Center: $(2, -4)$
Radius: $\sqrt{5}$

B)



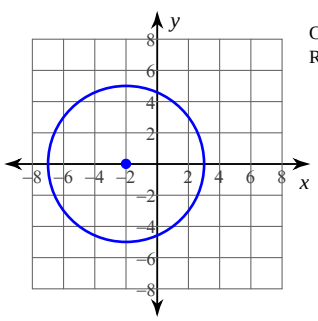
Center: $(-2, -3)$
Radius: $\sqrt{5}$

C)



Center: $(2, 2)$
Radius: $\sqrt{5}$

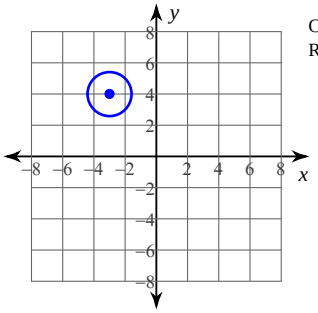
D)



Center: $(-2, 0)$
Radius: 5

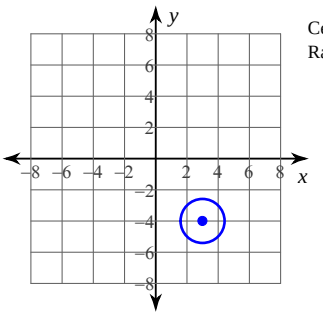
16) $23 + y^2 + 8y = -x^2 + 6x$

A)



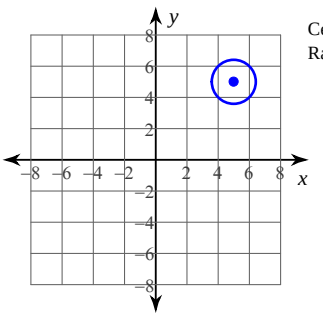
Center: $(-3, 4)$
Radius: $\sqrt{2}$

B)



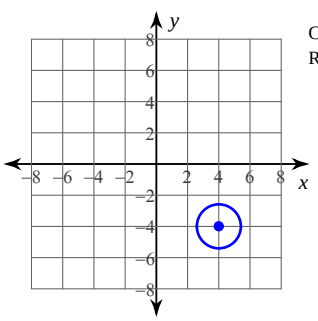
Center: $(3, -4)$
Radius: $\sqrt{2}$

C)



Center: $(5, 5)$
Radius: $\sqrt{2}$

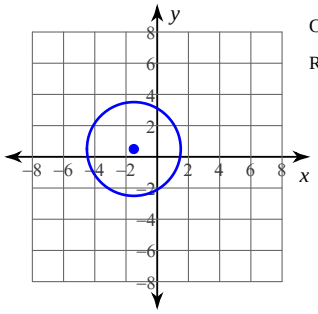
D)



Center: $(4, -4)$
Radius: $\sqrt{2}$

17) $2x^2 = 2y - 2y^2 - 6x - 3$

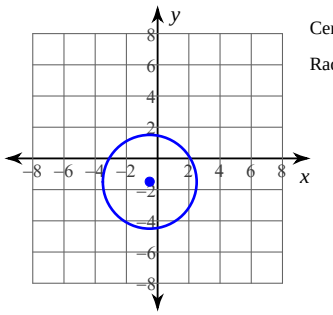
A)



Center: $\left(-\frac{3}{2}, \frac{1}{2}\right)$

Radius: 3

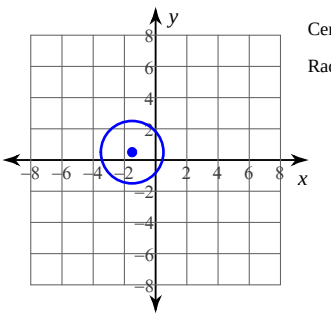
B)



Center: $\left(-\frac{1}{2}, -\frac{3}{2}\right)$

Radius: 3

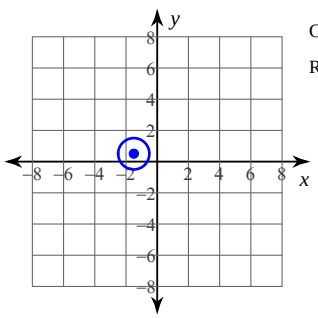
C)



Center: $\left(-\frac{3}{2}, \frac{1}{2}\right)$

Radius: 2

D)

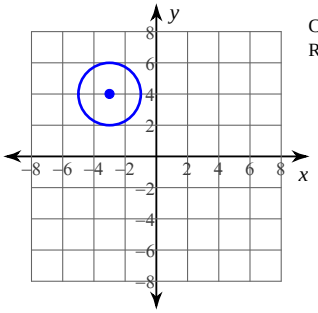


Center: $\left(-\frac{3}{2}, \frac{1}{2}\right)$

Radius: 1

18) $-6y + x^2 = -y^2 - 8x - 21$

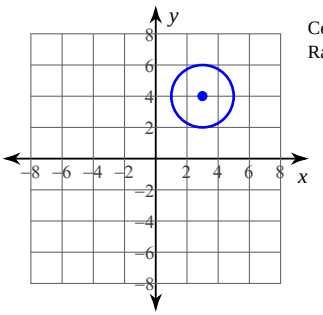
A)



Center: $(-3, 4)$

Radius: 2

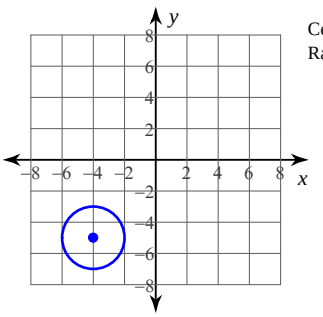
B)



Center: $(3, 4)$

Radius: 2

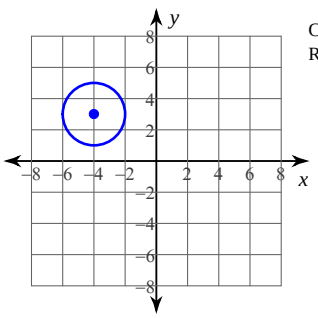
C)



Center: $(-4, -5)$

Radius: 2

D)

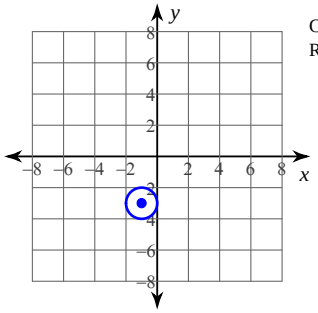


Center: $(-4, 3)$

Radius: 2

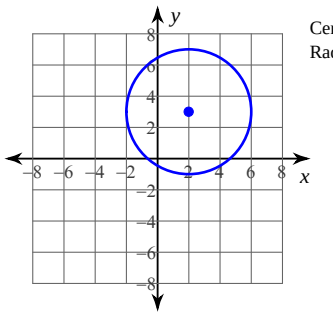
19) $6y + 6 + 2x + y^2 = -x^2$

A)



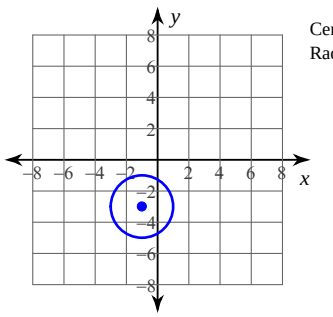
Center: (–1, –3)
Radius: 1

B)



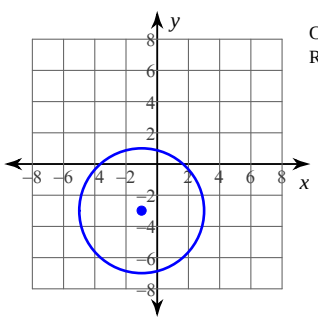
Center: (2, 3)
Radius: 4

C)



Center: (–1, –3)
Radius: 2

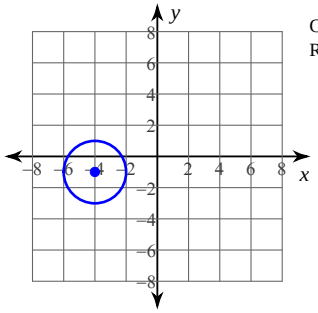
D)



Center: (–1, –3)
Radius: 4

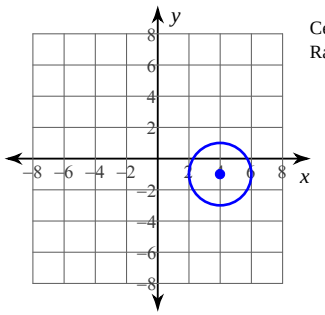
20) $x^2 + 2y + y^2 = -13 - 8x$

A)



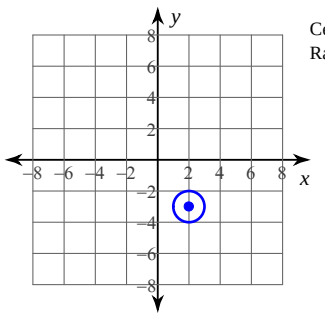
Center: (–4, –1)
Radius: 2

B)



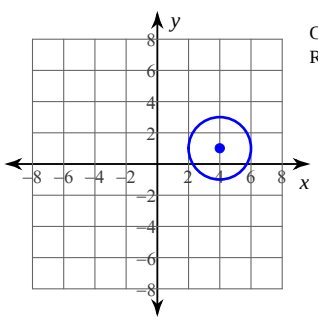
Center: (4, –1)
Radius: 2

C)



Center: (2, –3)
Radius: 1

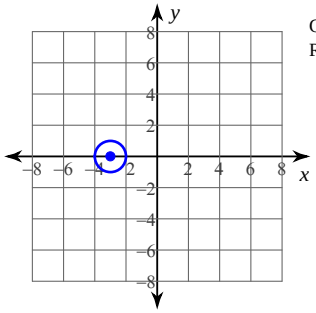
D)



Center: (4, 1)
Radius: 2

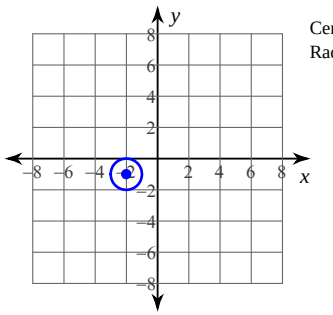
21) $y^2 - 6x = -4 - x^2$

A)



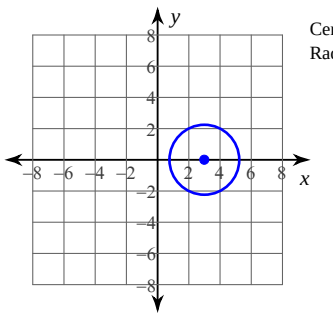
Center: $(-3, 0)$
Radius: 1

B)



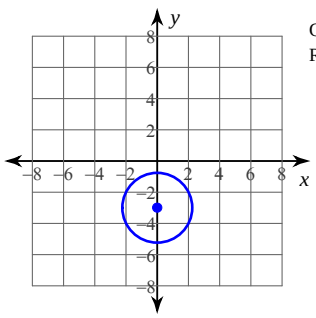
Center: $(-2, -1)$
Radius: 1

C)



Center: $(3, 0)$
Radius: $\sqrt{5}$

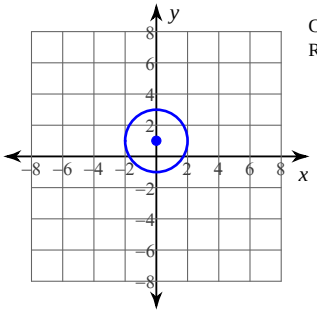
D)



Center: $(0, -3)$
Radius: $\sqrt{5}$

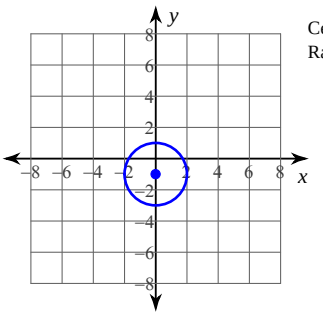
22) $-3 + y^2 = 2y - x^2$

A)



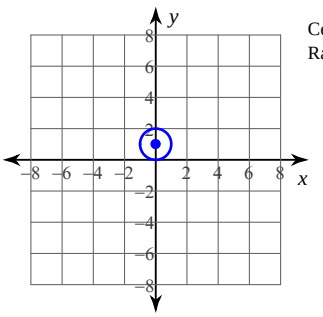
Center: $(0, 1)$
Radius: 2

B)



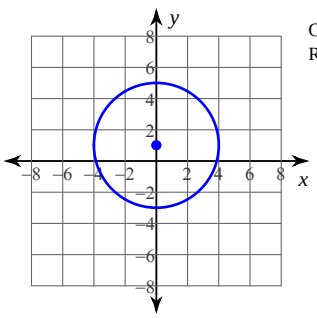
Center: $(0, -1)$
Radius: 2

C)



Center: $(0, 1)$
Radius: 1

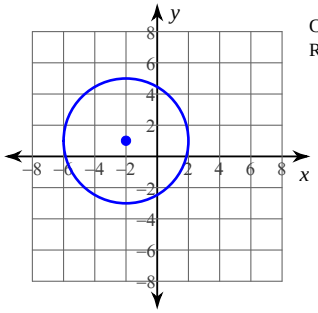
D)



Center: $(0, 1)$
Radius: 4

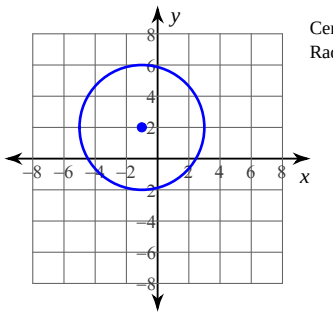
23) $-4y + x^2 = -y^2 - 2x + 11$

A)



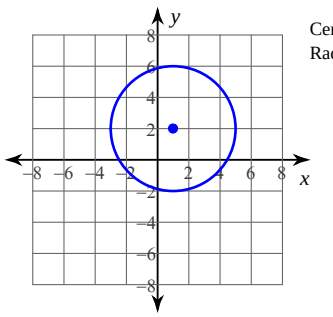
Center: $(-2, 1)$
Radius: 4

B)



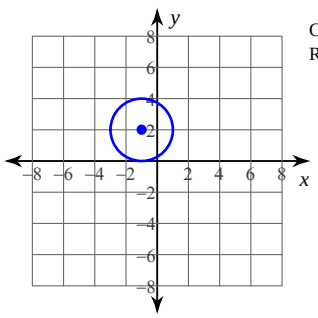
Center: $(-1, 2)$
Radius: 4

C)



Center: $(1, 2)$
Radius: 4

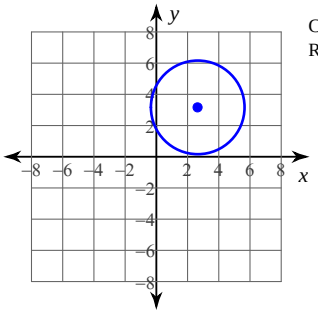
D)



Center: $(-1, 2)$
Radius: 2

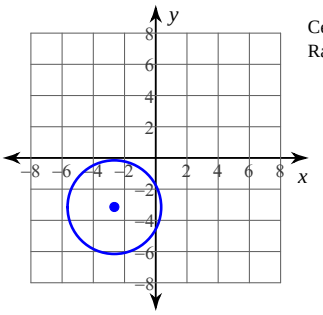
24) $-2x\sqrt{7} + y^2 + x^2 - 2y\sqrt{10} = -8$

A)



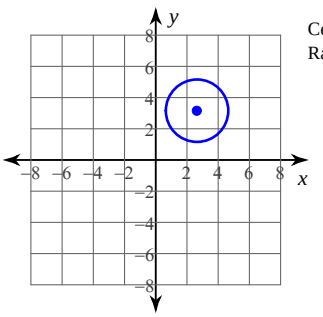
Center: $(\sqrt{7}, \sqrt{10})$
Radius: 3

B)



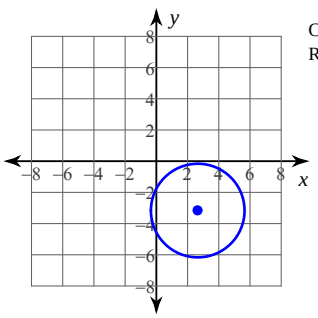
Center: $(-\sqrt{7}, -\sqrt{10})$
Radius: 3

C)



Center: $(\sqrt{7}, \sqrt{10})$
Radius: 2

D)



Center: $(\sqrt{7}, -\sqrt{10})$
Radius: 3

Answers to Assignment (ID: 4)

1) A
2) D
3) D
4) D
5) D
6) C
7) A
8) A
9) D
10) D
11) C
12) D
13) B
14) C
15) A
16) B
17) D
18) D
19) C
20) A
21) C
22) A
23) B
24) A

Geometry Name_____

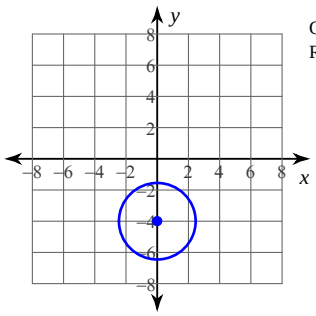
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

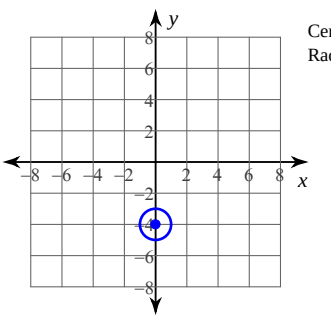
1) $x^2 + (y+4)^2 = 6$

A)



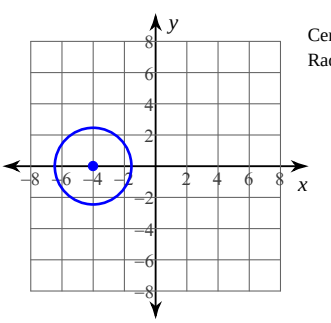
Center: (0, –4)
Radius: $\sqrt{6}$

B)



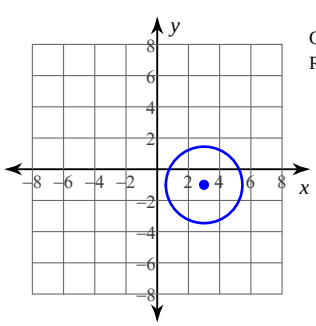
Center: (0, –4)
Radius: 1

C)



Center: (–4, 0)
Radius: $\sqrt{6}$

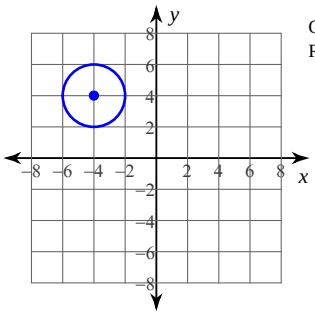
D)



Center: (3, –1)
Radius: $\sqrt{6}$

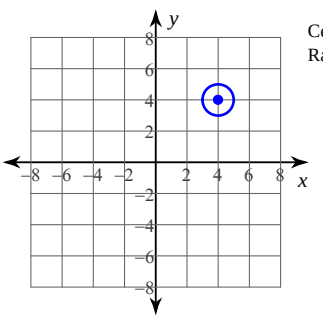
2) $y^2 - 8y = -x^2 + 8x - 31$

A)



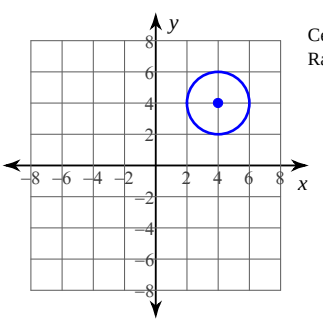
Center: (–4, 4)
Radius: 2

B)



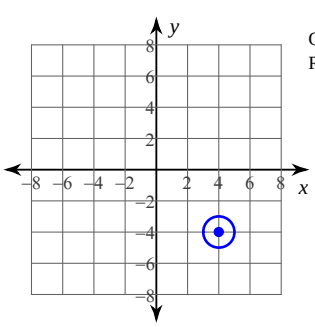
Center: (4, 4)
Radius: 1

C)



Center: (4, 4)
Radius: 2

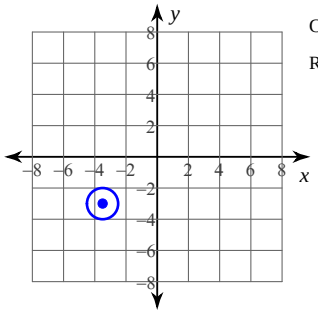
D)



Center: (4, –4)
Radius: 1

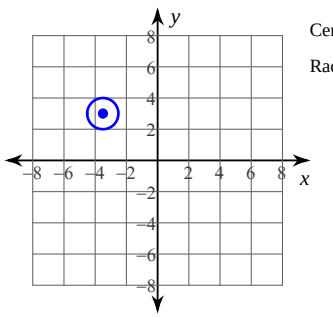
3) $-24y + 4y^2 + 4x^2 + 81 = -28x$

A)



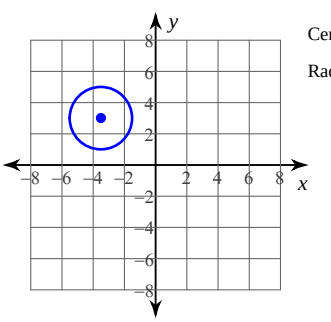
Center: $\left(-\frac{7}{2}, -3\right)$
Radius: 1

B)



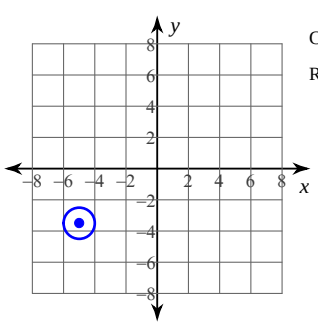
Center: $\left(-\frac{7}{2}, 3\right)$
Radius: 1

C)



Center: $\left(-\frac{7}{2}, 3\right)$
Radius: 2

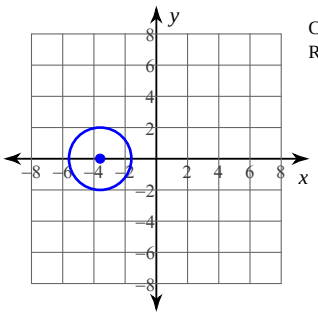
D)



Center: $\left(-5, -\frac{7}{2}\right)$
Radius: 1

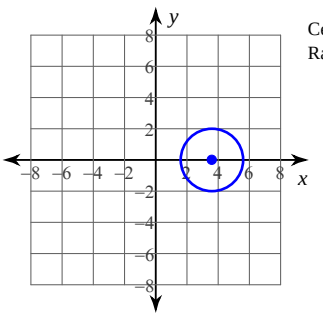
4) $y^2 - 2x\sqrt{13} + x^2 = -9$

A)



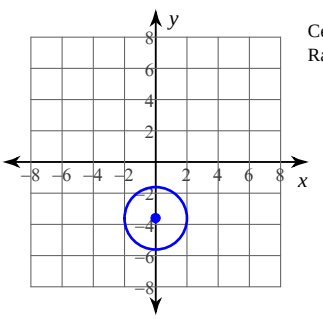
Center: $\left(-\sqrt{13}, 0\right)$
Radius: 2

B)



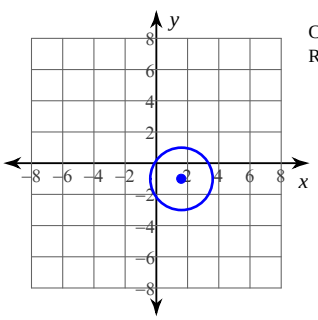
Center: $\left(\sqrt{13}, 0\right)$
Radius: 2

C)



Center: $\left(0, -\sqrt{13}\right)$
Radius: 2

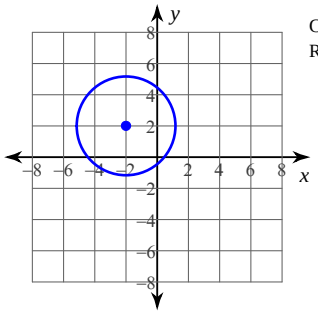
D)



Center: $\left(\sqrt{13} - 2, -1\right)$
Radius: 2

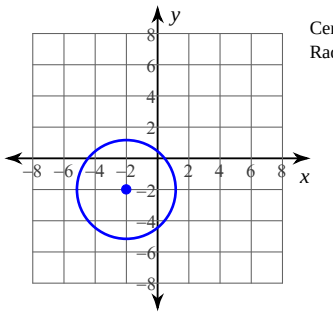
5) $(x+2)^2+(y+2)^2=10$

A)



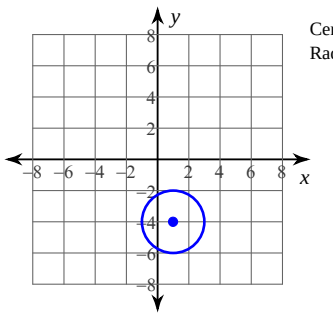
Center: $(-2, 2)$
Radius: $\sqrt{10}$

B)



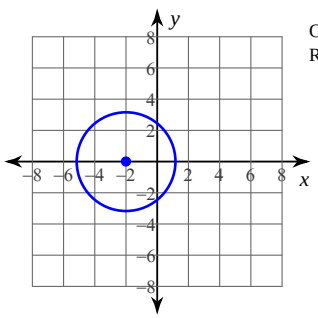
Center: $(-2, -2)$
Radius: $\sqrt{10}$

C)



Center: $(1, -4)$
Radius: 2

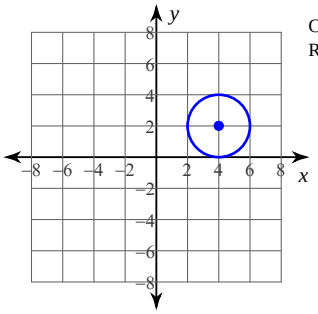
D)



Center: $(-2, 0)$
Radius: $\sqrt{10}$

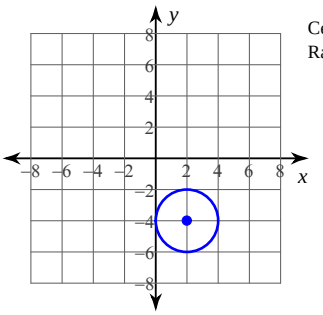
6) $(x+4)^2+(y+2)^2=4$

A)



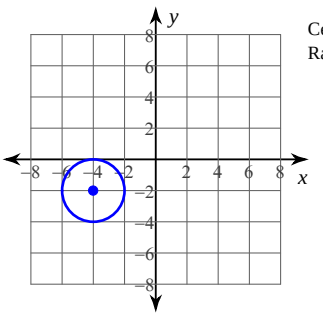
Center: $(4, 2)$
Radius: 2

B)



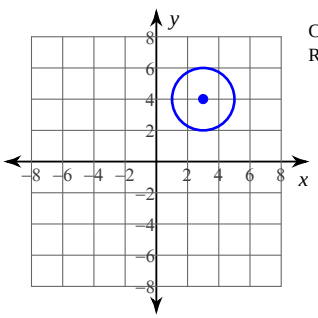
Center: $(2, -4)$
Radius: 2

C)



Center: $(-4, -2)$
Radius: 2

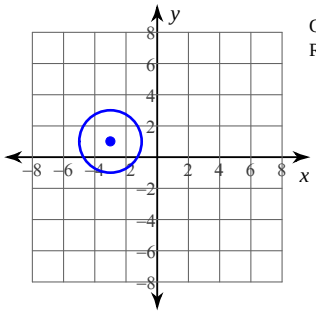
D)



Center: $(3, 4)$
Radius: 2

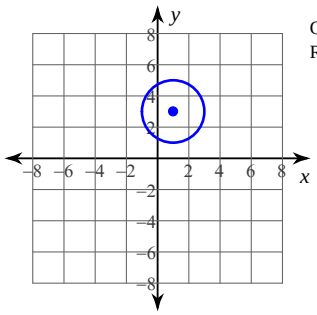
7) $(x-3)^2+(y+1)^2=4$

A)



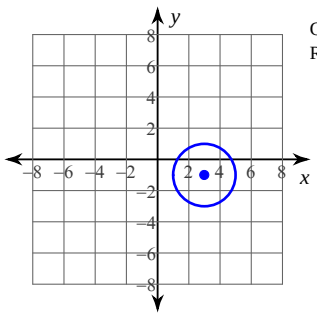
Center: (–3, 1)
Radius: 2

B)



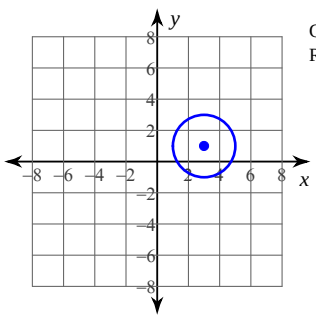
Center: (1, 3)
Radius: 2

C)



Center: (3, –1)
Radius: 2

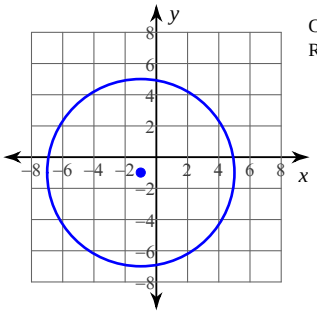
D)



Center: (3, 1)
Radius: 2

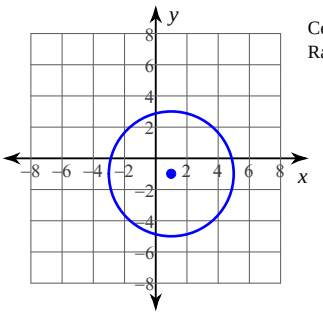
8) $(x-1)^2+(y+1)^2=36$

A)



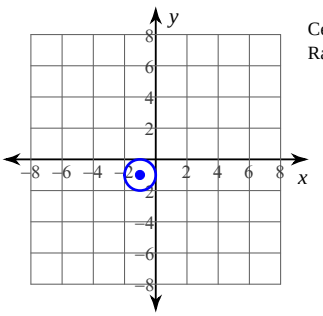
Center: (–1, –1)
Radius: 6

B)



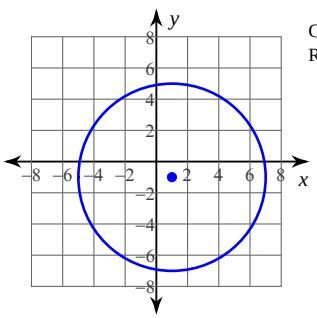
Center: (1, –1)
Radius: 4

C)



Center: (–1, –1)
Radius: 1

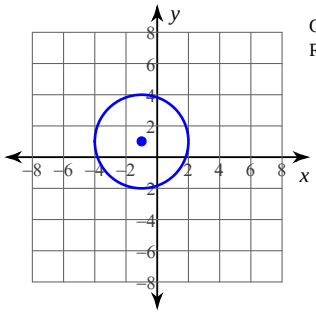
D)



Center: (1, –1)
Radius: 6

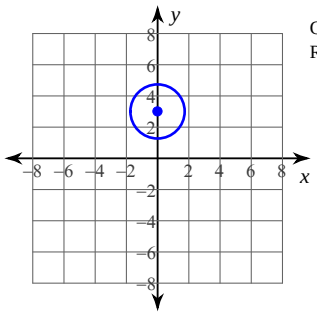
9) $(x+1)^2+(y-1)^2=3$

A)



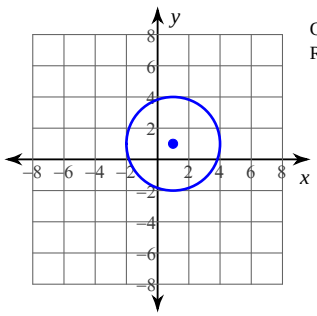
Center: $(-1, 1)$
Radius: 3

B)



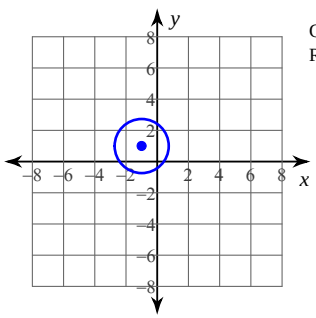
Center: $(0, 3)$
Radius: $\sqrt{3}$

C)



Center: $(1, 1)$
Radius: 3

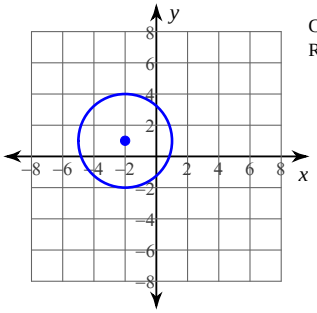
D)



Center: $(-1, 1)$
Radius: $\sqrt{3}$

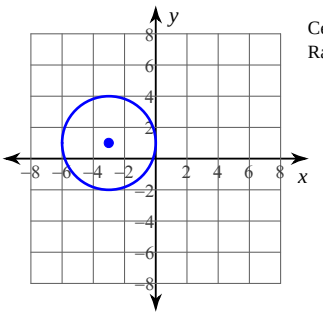
10) $1=-y^2-6x+2y-x^2$

A)



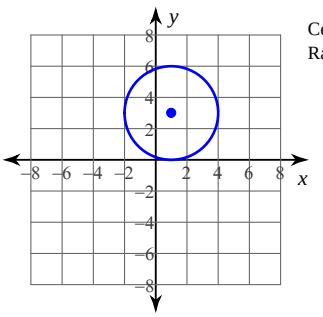
Center: $(-2, 1)$
Radius: 3

B)



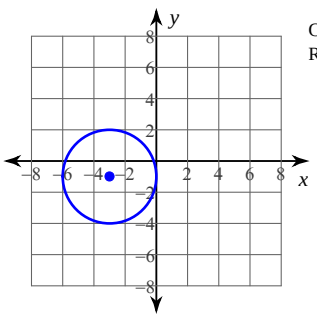
Center: $(-3, 1)$
Radius: 3

C)



Center: $(1, 3)$
Radius: 3

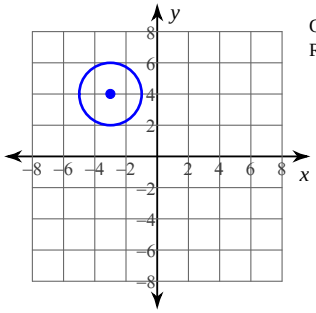
D)



Center: $(-3, -1)$
Radius: 3

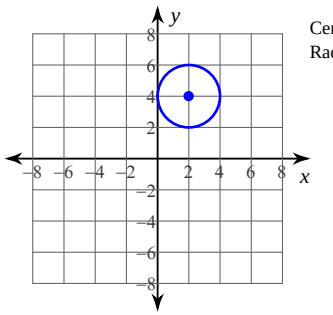
11) $-8y - 4x = -16 - y^2 - x^2$

A)



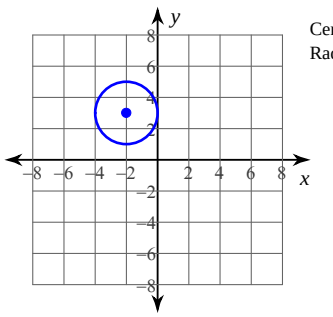
Center: (–3, 4)
Radius: 2

B)



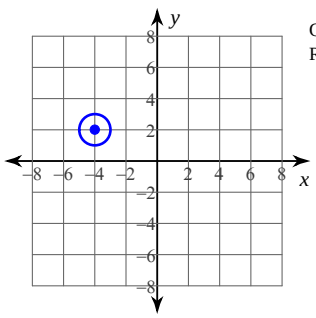
Center: (2, 4)
Radius: 2

C)



Center: (–2, 3)
Radius: 2

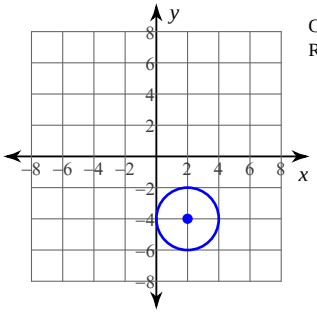
D)



Center: (–4, 2)
Radius: 1

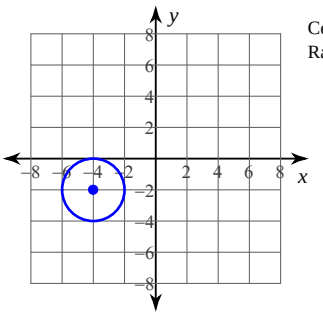
12) $y^2 - 8x - 4y + x^2 + 16 = 0$

A)



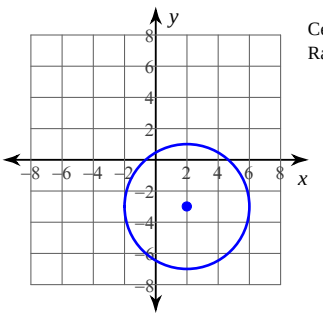
Center: (2, –4)
Radius: 2

B)



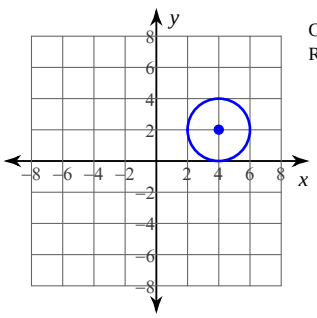
Center: (–4, –2)
Radius: 2

C)



Center: (2, –3)
Radius: 4

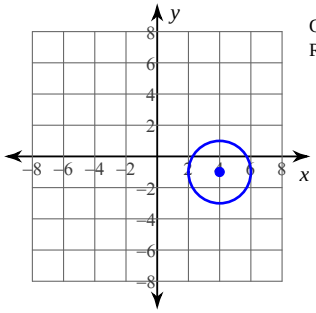
D)



Center: (4, 2)
Radius: 2

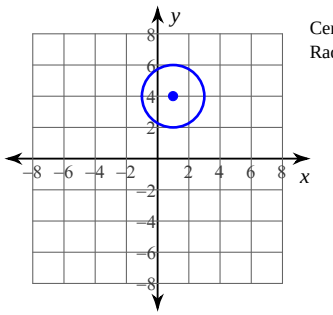
13) $-8y + y^2 = -x^2 + 2x - 13$

A)



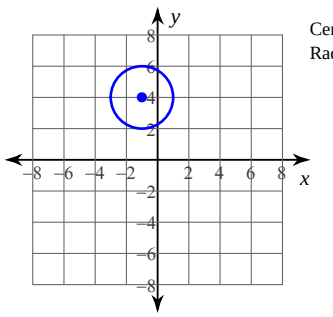
Center: (4, –1)
Radius: 2

B)



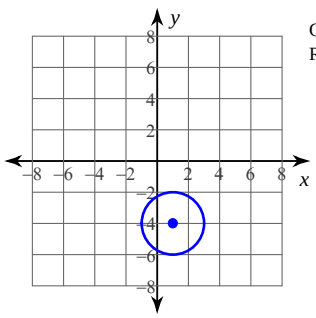
Center: (1, 4)
Radius: 2

C)



Center: (–1, 4)
Radius: 2

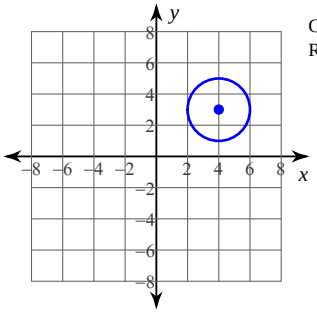
D)



Center: (1, –4)
Radius: 2

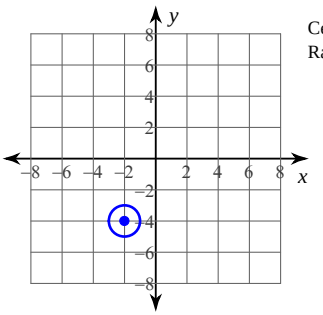
14) $19 + x^2 = -4x - 8y - y^2$

A)



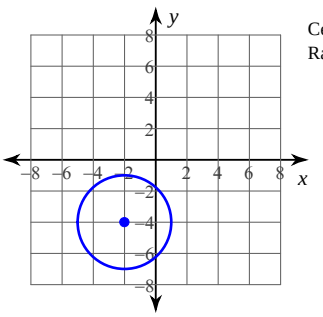
Center: (4, 3)
Radius: 2

B)



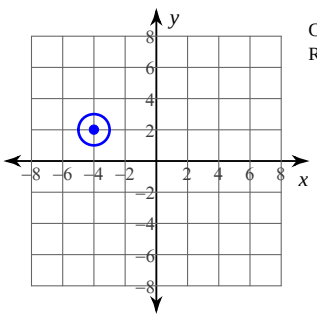
Center: (–2, –4)
Radius: 1

C)



Center: (–2, –4)
Radius: 3

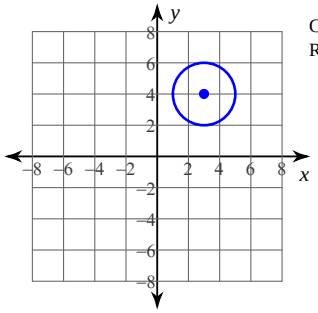
D)



Center: (–4, 2)
Radius: 1

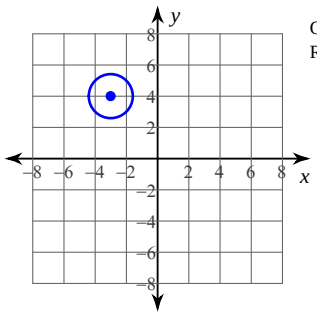
15) $6y + 23 + y^2 + 8x = -x^2$

A)



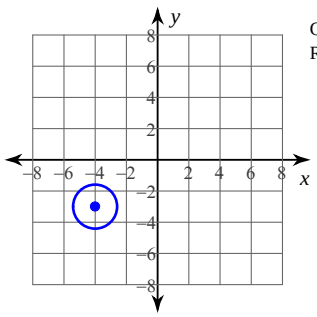
Center: (3, 4)
Radius: 2

B)



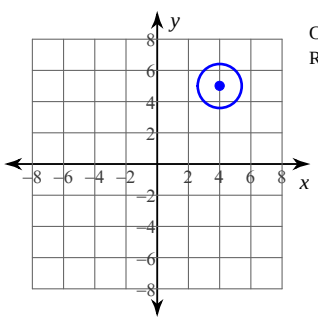
Center: (−3, 4)
Radius: $\sqrt{2}$

C)



Center: (−4, −3)
Radius: $\sqrt{2}$

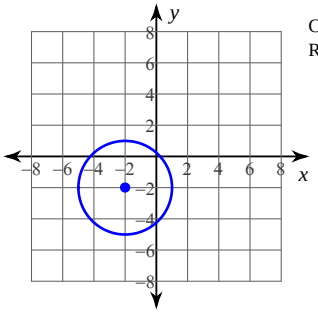
D)



Center: (4, 5)
Radius: $\sqrt{2}$

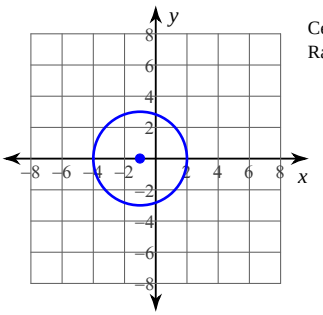
16) $-1 + 4y - 4x = -y^2 - x^2$

A)



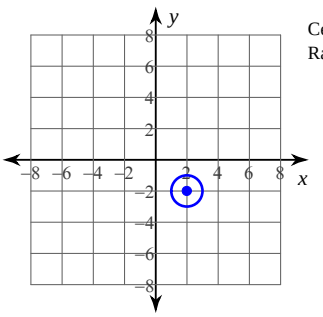
Center: (−2, −2)
Radius: 3

B)



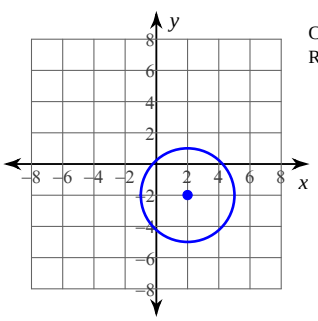
Center: (−1, 0)
Radius: 3

C)



Center: (2, −2)
Radius: 1

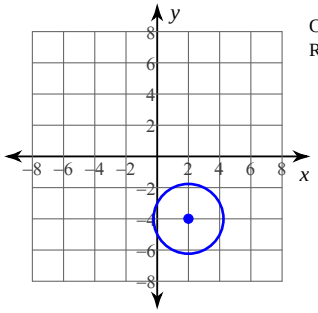
D)



Center: (2, −2)
Radius: 3

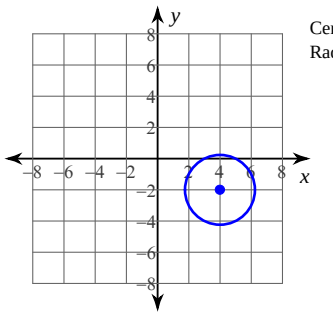
17) $y^2 = 8x - x^2 - 15 - 4y$

A)



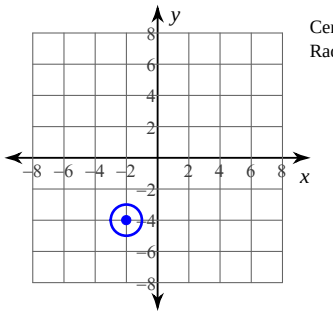
Center: $(2, -4)$
Radius: $\sqrt{5}$

B)



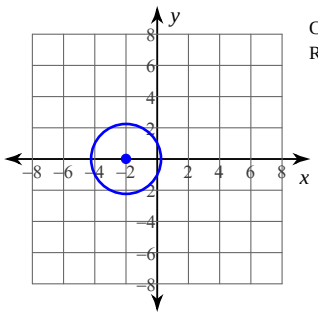
Center: $(4, -2)$
Radius: $\sqrt{5}$

C)



Center: $(-2, -4)$
Radius: 1

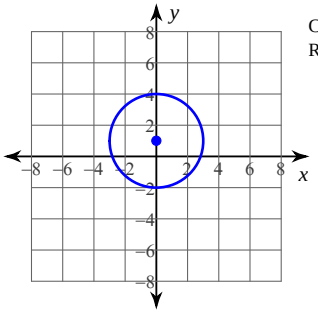
D)



Center: $(-2, 0)$
Radius: $\sqrt{5}$

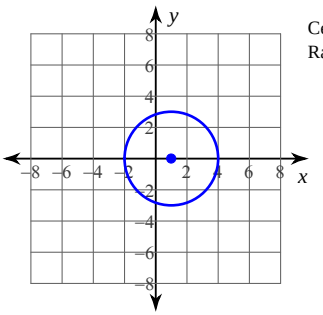
18) $y^2 - 8 = -x^2 - 2x$

A)



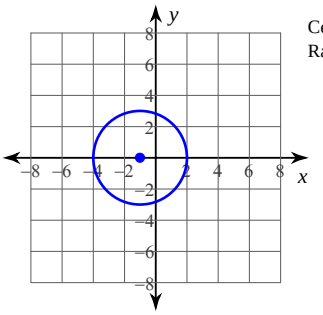
Center: $(0, 1)$
Radius: 3

B)



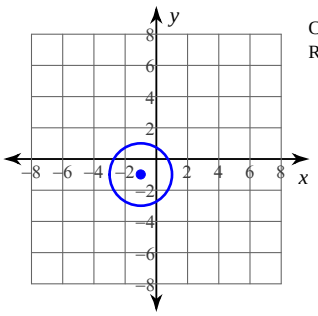
Center: $(1, 0)$
Radius: 3

C)



Center: $(-1, 0)$
Radius: 3

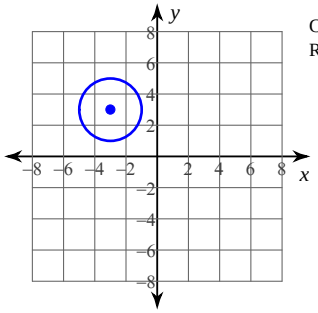
D)



Center: $(-1, -1)$
Radius: 2

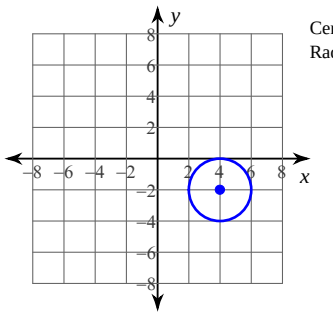
19) $-6x = -x^2 - y^2 + 6y - 14$

A)



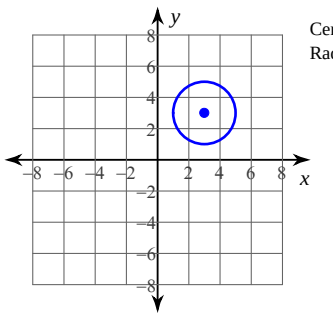
Center: (–3, 3)
Radius: 2

B)



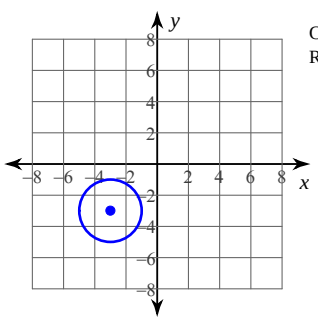
Center: (4, –2)
Radius: 2

C)



Center: (3, 3)
Radius: 2

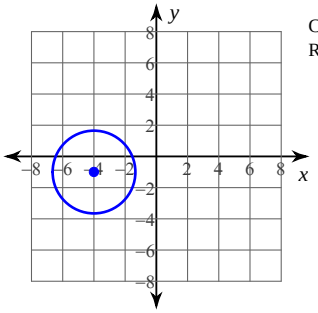
D)



Center: (–3, –3)
Radius: 2

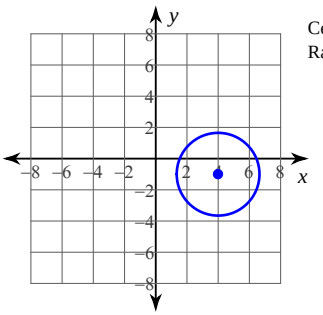
20) $8x + 10 - 2y = -x^2 - y^2$

A)



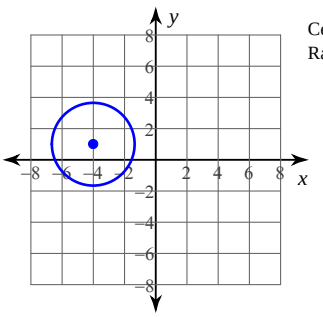
Center: (–4, –1)
Radius: $\sqrt{7}$

B)



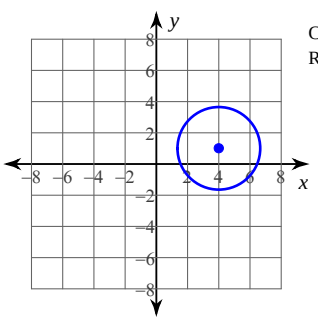
Center: (4, –1)
Radius: $\sqrt{7}$

C)



Center: (–4, 1)
Radius: $\sqrt{7}$

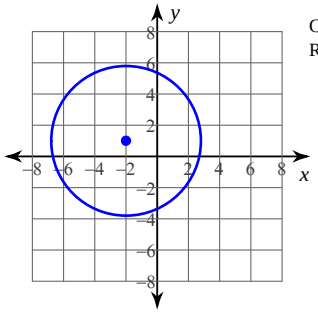
D)



Center: (4, 1)
Radius: $\sqrt{7}$

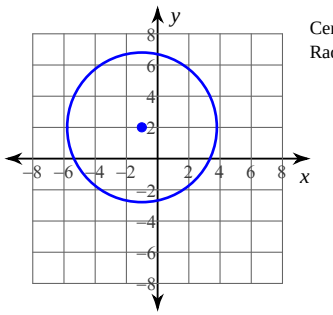
21) $-18 = 2y - x^2 - 4x - y^2$

A)



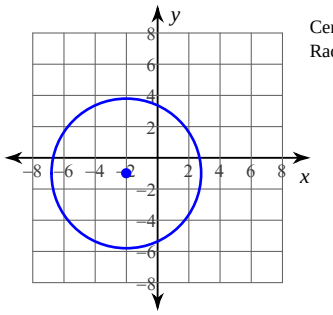
Center: $(-2, 1)$
Radius: $\sqrt{23}$

B)



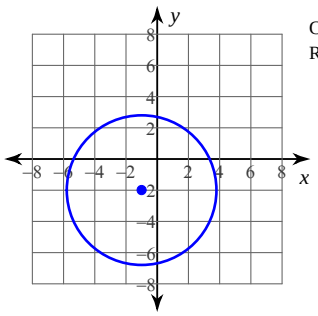
Center: $(-1, 2)$
Radius: $\sqrt{23}$

C)



Center: $(-2, -1)$
Radius: $\sqrt{23}$

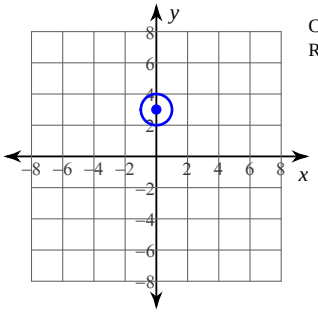
D)



Center: $(-1, -2)$
Radius: $\sqrt{23}$

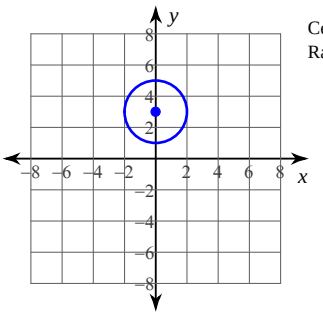
22) $-6y + 5 + x^2 + y^2 = 0$

A)



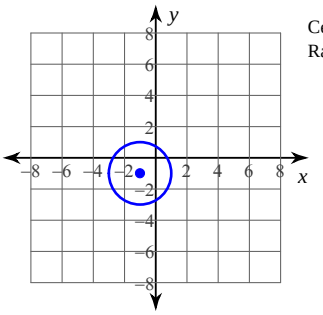
Center: $(0, 3)$
Radius: 1

B)



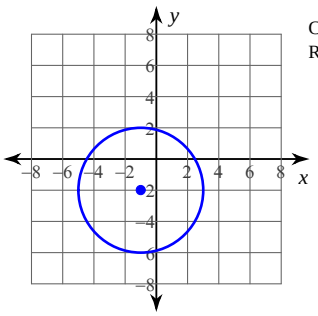
Center: $(0, 3)$
Radius: 2

C)



Center: $(-1, -1)$
Radius: 2

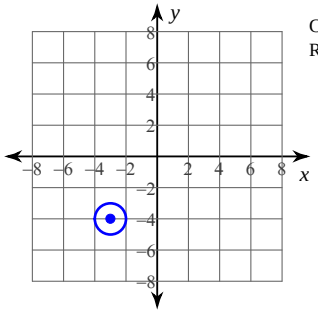
D)



Center: $(-1, -2)$
Radius: 4

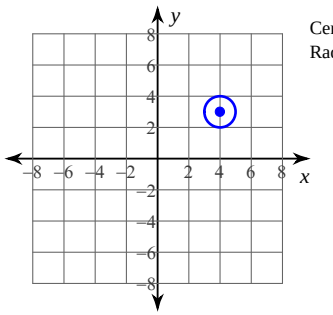
23) $y^2 + x^2 + 24 + 8y = -6x$

A)



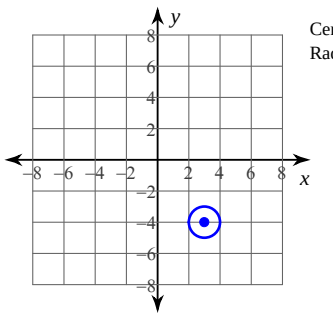
Center: $(-3, -4)$
Radius: 1

B)



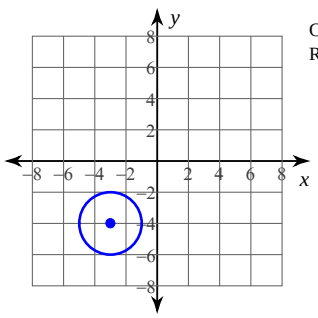
Center: $(4, 3)$
Radius: 1

C)



Center: $(3, -4)$
Radius: 1

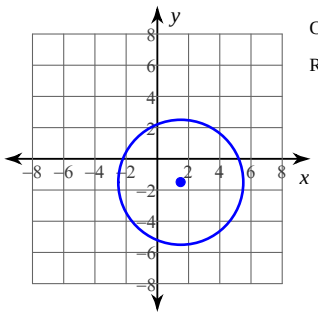
D)



Center: $(-3, -4)$
Radius: 2

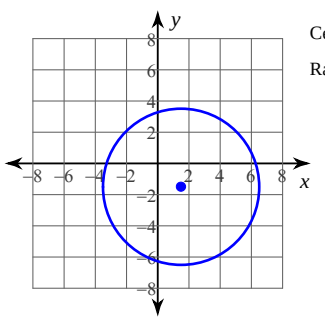
24) $2y^2 - 6x = 6y - 2x^2 + 41$

A)



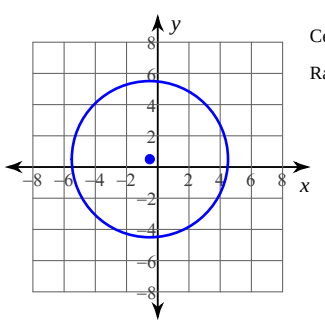
Center: $\left(\frac{3}{2}, -\frac{3}{2}\right)$
Radius: 4

B)



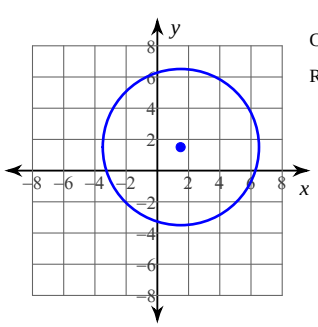
Center: $\left(\frac{3}{2}, -\frac{3}{2}\right)$
Radius: 5

C)



Center: $\left(-\frac{1}{2}, \frac{1}{2}\right)$
Radius: 5

D)



Center: $\left(\frac{3}{2}, \frac{3}{2}\right)$
Radius: 5

Answers to Assignment (ID: 5)

1) A
2) B
3) B
4) B
5) B
6) C
7) C
8) D
9) D
10) B
11) B
12) D
13) B
14) B
15) C
16) D
17) B
18) C
19) C
20) C
21) A
22) B
23) A
24) D

Geometry Name_____

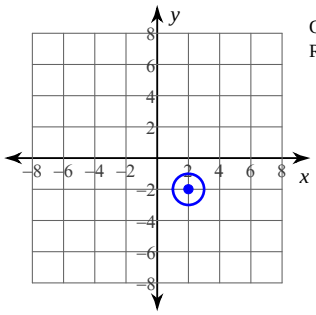
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

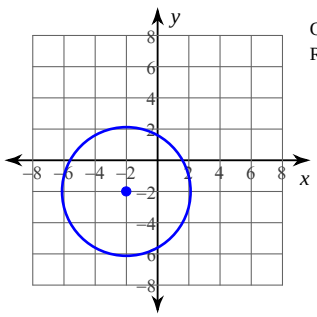
1) $y^2 - 9 + x^2 + 4y = 4x$

A)



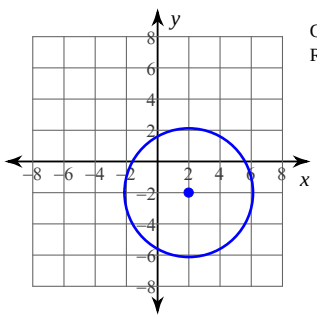
Center: (2, –2)
Radius: 1

B)



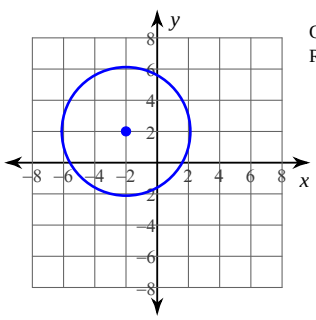
Center: (–2, –2)
Radius: $\sqrt{17}$

C)



Center: (2, –2)
Radius: $\sqrt{17}$

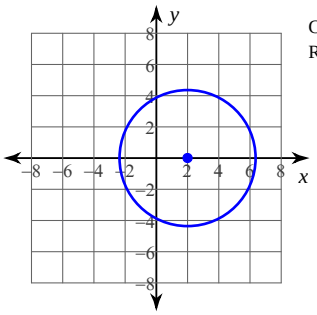
D)



Center: (–2, 2)
Radius: $\sqrt{17}$

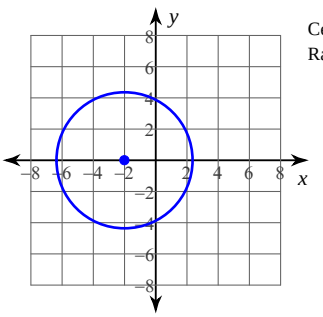
2) $-15 = -x^2 - y^2 - 4y$

A)



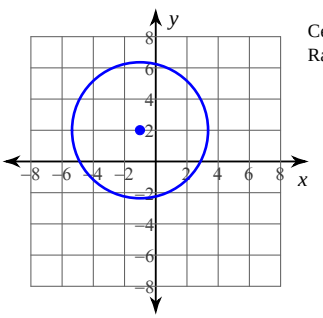
Center: (2, 0)
Radius: $\sqrt{19}$

B)



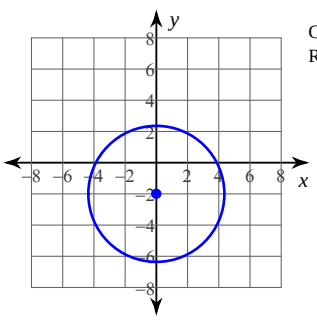
Center: (–2, 0)
Radius: $\sqrt{19}$

C)



Center: (–1, 2)
Radius: $\sqrt{19}$

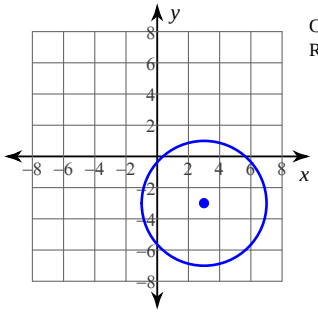
D)



Center: (0, –2)
Radius: $\sqrt{19}$

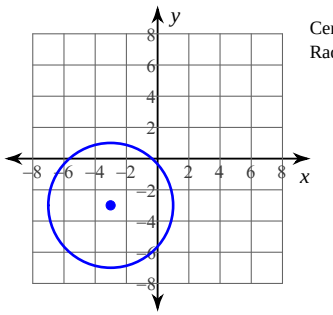
3) $6y + y^2 = 6x - 2 - x^2$

A)



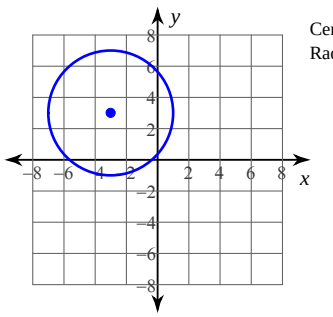
Center: $(3, -3)$
Radius: 4

B)



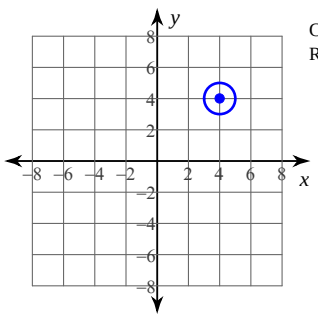
Center: $(-3, -3)$
Radius: 4

C)



Center: $(-3, 3)$
Radius: 4

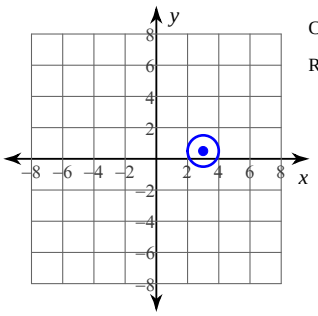
D)



Center: $(4, 4)$
Radius: 1

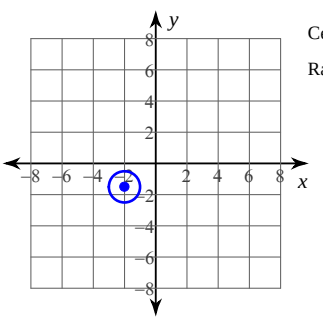
4) $4x^2 - 24x - 4y = -4y^2 - 33$

A)



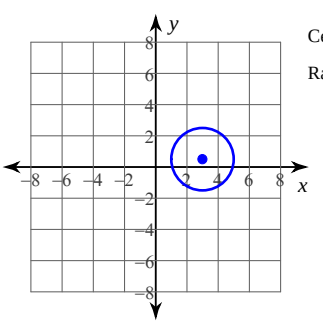
Center: $\left(3, \frac{1}{2}\right)$
Radius: 1

B)



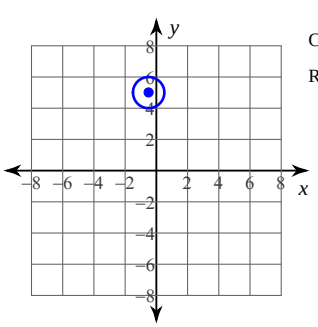
Center: $\left(-2, -\frac{3}{2}\right)$
Radius: 1

C)



Center: $\left(3, \frac{1}{2}\right)$
Radius: 2

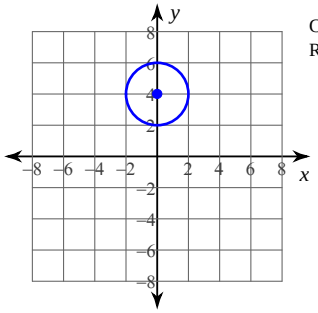
D)



Center: $\left(-\frac{1}{2}, 5\right)$
Radius: 1

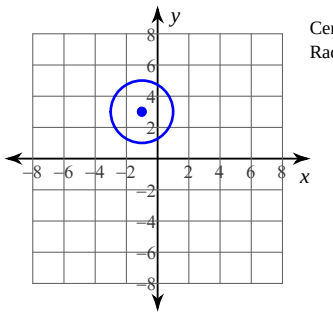
5) $y^2 + 12 = -x^2 - 8x$

A)



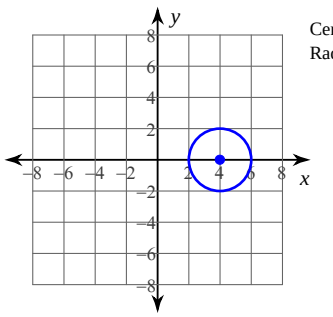
Center: $(0, 4)$
Radius: 2

B)



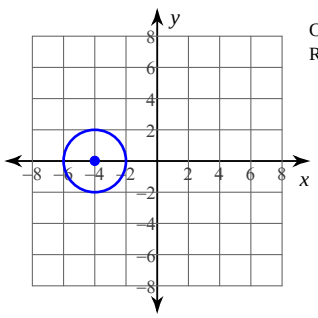
Center: $(-1, 3)$
Radius: 2

C)



Center: $(4, 0)$
Radius: 2

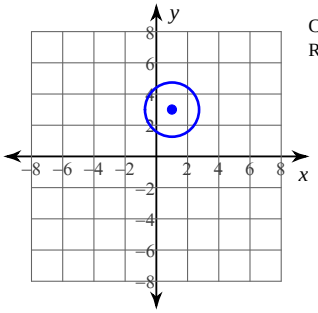
D)



Center: $(-4, 0)$
Radius: 2

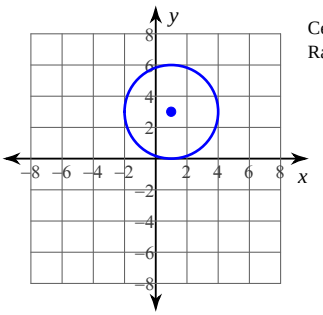
6) $7 - 2x - 6y = -x^2 - y^2$

A)



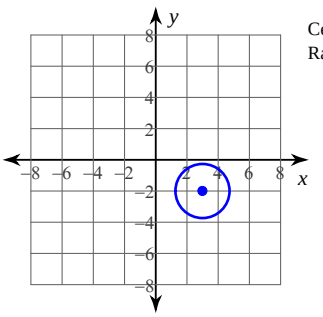
Center: $(1, 3)$
Radius: $\sqrt{3}$

B)



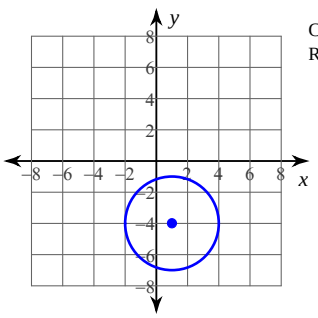
Center: $(1, 3)$
Radius: 3

C)



Center: $(3, -2)$
Radius: $\sqrt{3}$

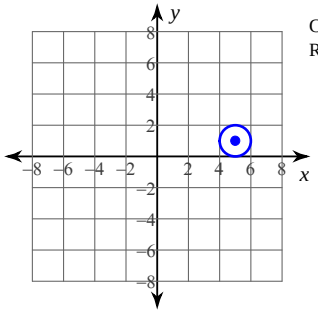
D)



Center: $(1, -4)$
Radius: 3

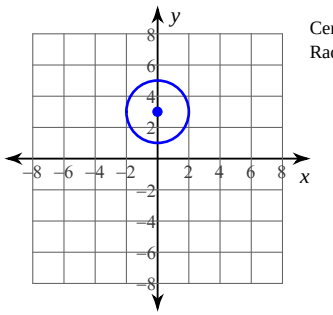
7) $8 = 6y - x^2 - y^2$

A)



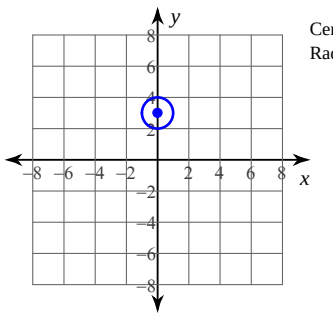
Center: $(5, 1)$
Radius: 1

B)



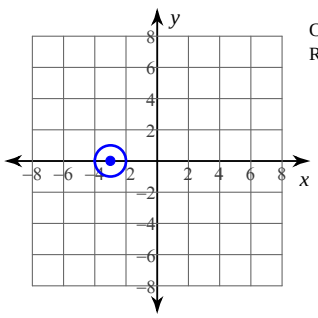
Center: $(0, 3)$
Radius: 2

C)



Center: $(0, 3)$
Radius: 1

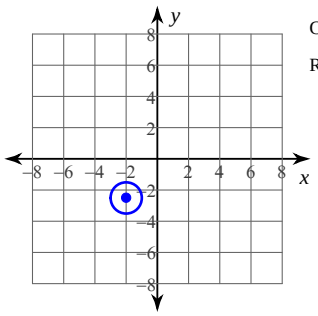
D)



Center: $(-3, 0)$
Radius: 1

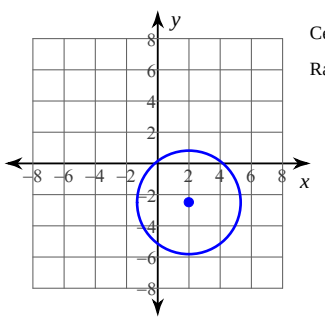
8) $4x^2 - 20x + 4y^2 = 3 + 16y$

A)



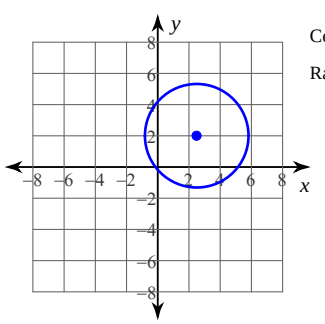
Center: $\left(-2, -\frac{5}{2}\right)$
Radius: 1

B)



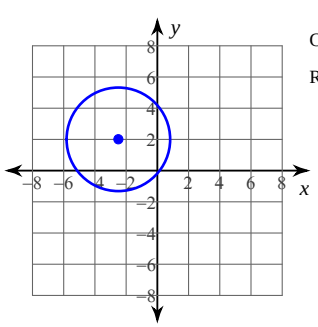
Center: $\left(2, -\frac{5}{2}\right)$
Radius: $\sqrt{11}$

C)



Center: $\left(\frac{5}{2}, 2\right)$
Radius: $\sqrt{11}$

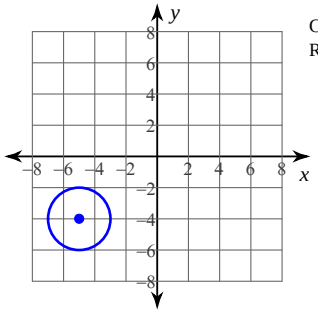
D)



Center: $\left(-\frac{5}{2}, 2\right)$
Radius: $\sqrt{11}$

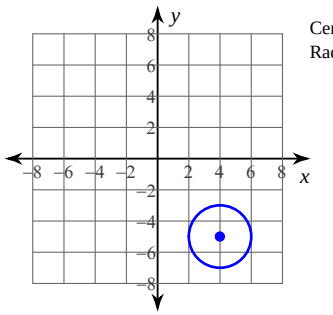
9) $6x + 21 = -x^2 - y^2 + 8y$

A)



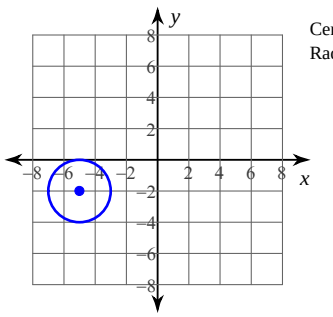
Center: (–5, –4)
Radius: 2

B)



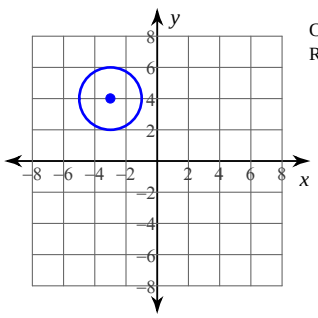
Center: (4, –5)
Radius: 2

C)



Center: (–5, –2)
Radius: 2

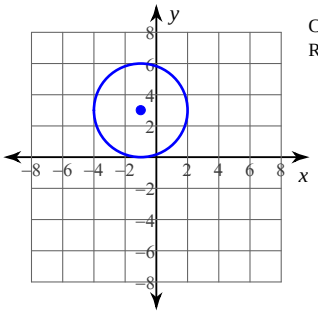
D)



Center: (–3, 4)
Radius: 2

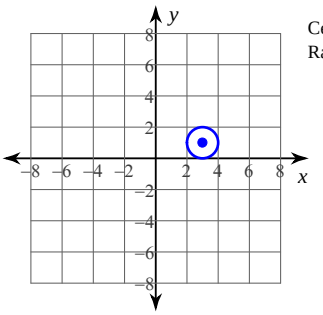
10) $(x-1)^2 + (y+3)^2 = 9$

A)



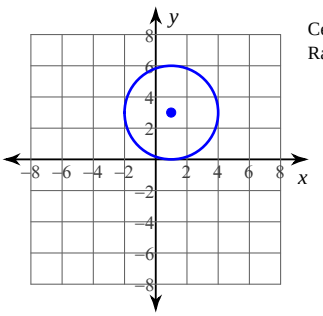
Center: (–1, 3)
Radius: 3

B)



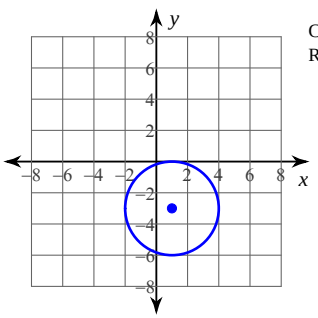
Center: (3, 1)
Radius: 1

C)



Center: (1, 3)
Radius: 3

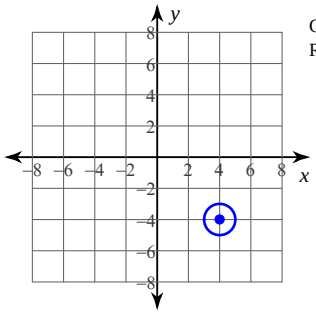
D)



Center: (1, –3)
Radius: 3

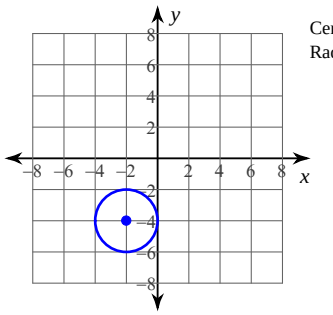
11) $(x-4)^2+(y+4)^2=4$

A)



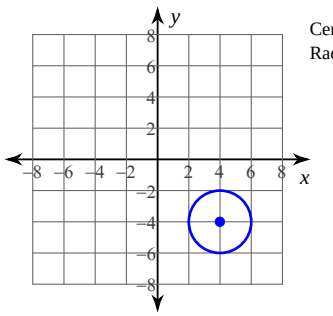
Center: (4, –4)
Radius: 1

B)



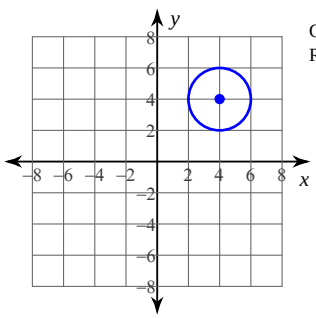
Center: (–2, –4)
Radius: 2

C)



Center: (4, –4)
Radius: 2

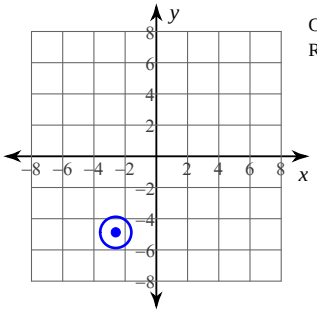
D)



Center: (4, 4)
Radius: 2

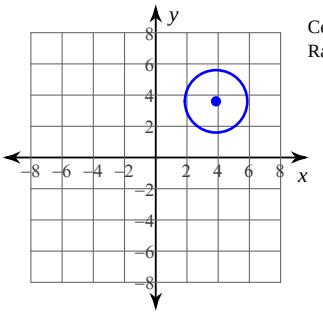
12) $\left(x-\sqrt{15}\right)^2+\left(y-\sqrt{13}\right)^2=1$

A)



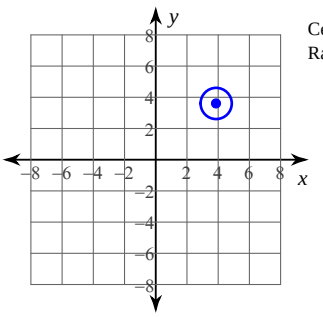
Center: $(-\sqrt{13}+1, -\sqrt{15}-1)$
Radius: 1

B)



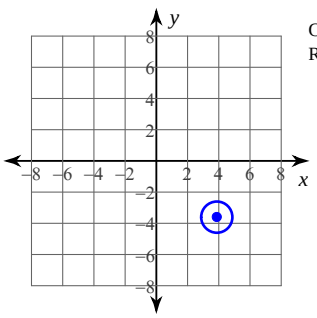
Center: $(\sqrt{15}, \sqrt{13})$
Radius: 2

C)



Center: $(\sqrt{15}, \sqrt{13})$
Radius: 1

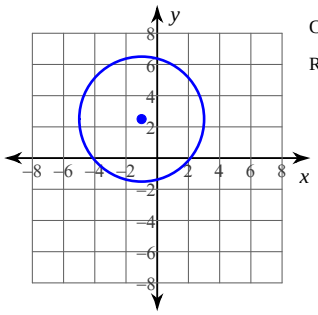
D)



Center: $(\sqrt{15}, -\sqrt{13})$
Radius: 1

13) $(x+1)^2 + \left(y - \frac{5}{2}\right)^2 = 16$

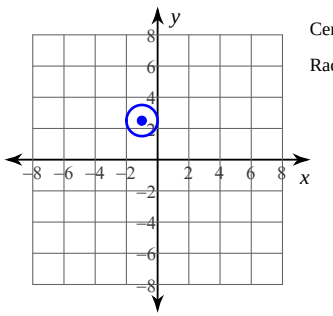
A)



Center: $\left(-1, \frac{5}{2}\right)$

Radius: 4

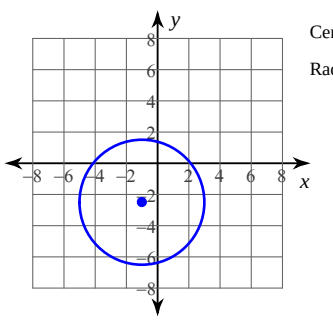
B)



Center: $\left(-1, \frac{5}{2}\right)$

Radius: 1

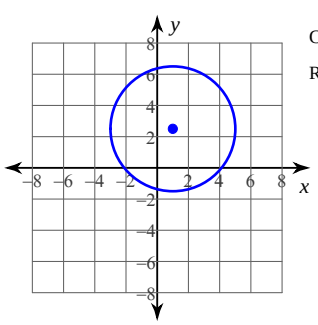
C)



Center: $\left(-1, -\frac{5}{2}\right)$

Radius: 4

D)

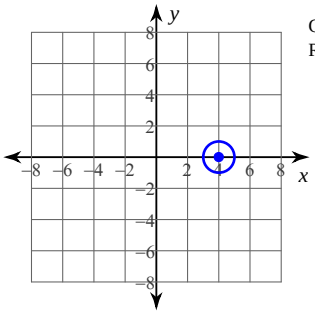


Center: $\left(1, \frac{5}{2}\right)$

Radius: 4

14) $(x+4)^2 + y^2 = 1$

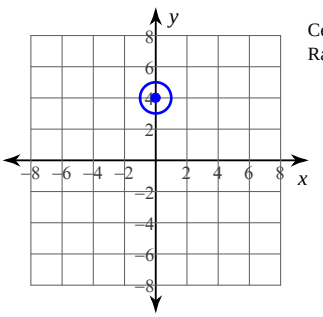
A)



Center: (4, 0)

Radius: 1

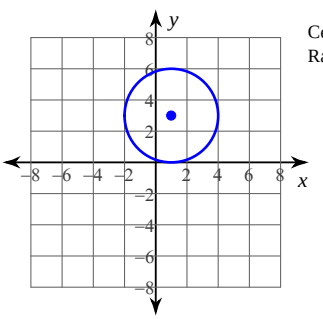
B)



Center: (0, 4)

Radius: 1

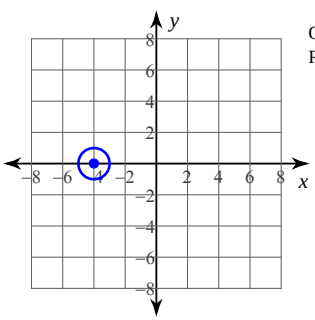
C)



Center: (1, 3)

Radius: 3

D)

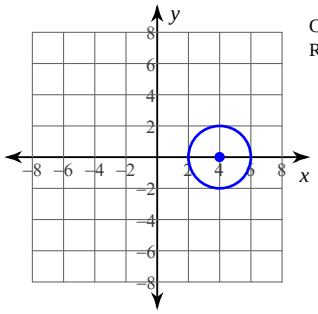


Center: (–4, 0)

Radius: 1

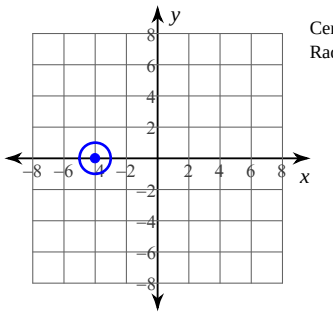
15) $(x-4)^2 + y^2 = 1$

A)



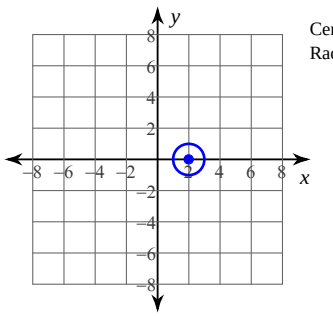
Center: (4, 0)
Radius: 2

B)



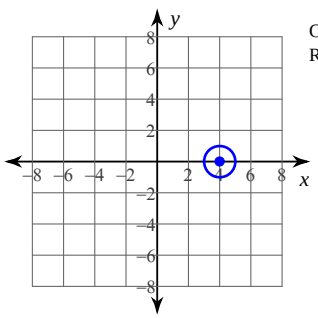
Center: (−4, 0)
Radius: 1

C)



Center: (2, 0)
Radius: 1

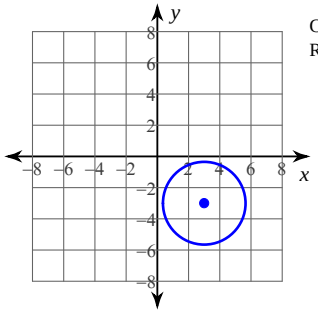
D)



Center: (4, 0)
Radius: 1

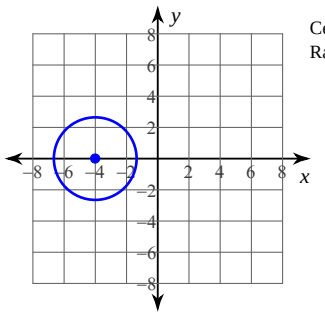
16) $x^2 + y^2 = -2x + 4y + 2$

A)



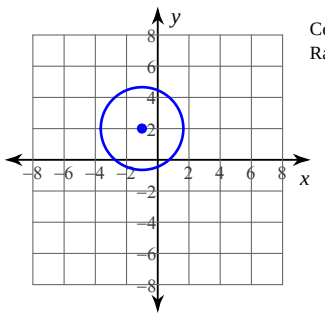
Center: (3, −3)
Radius: $\sqrt{7}$

B)



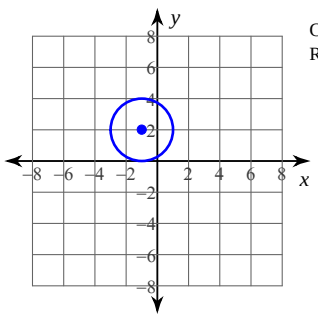
Center: (−4, 0)
Radius: $\sqrt{7}$

C)



Center: (−1, 2)
Radius: $\sqrt{7}$

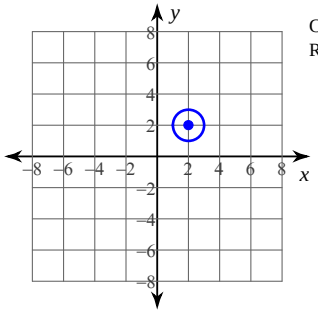
D)



Center: (−1, 2)
Radius: 2

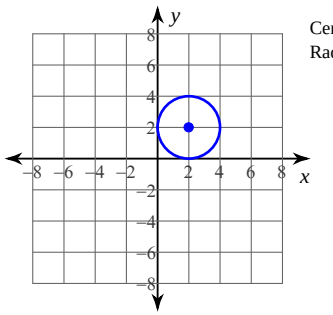
17) $-4y - 4x + y^2 = -7 - x^2$

A)



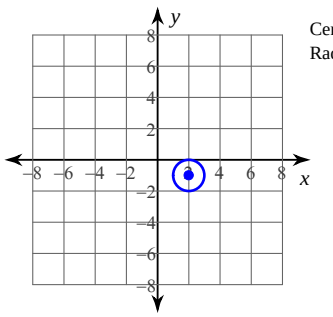
Center: (2, 2)
Radius: 1

B)



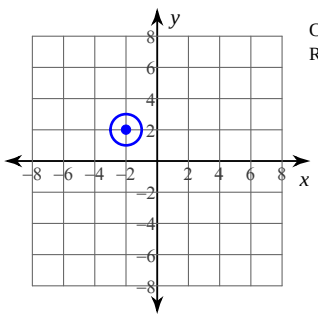
Center: (2, 2)
Radius: 2

C)



Center: (2, –1)
Radius: 1

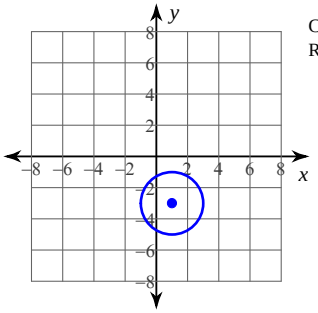
D)



Center: (–2, 2)
Radius: 1

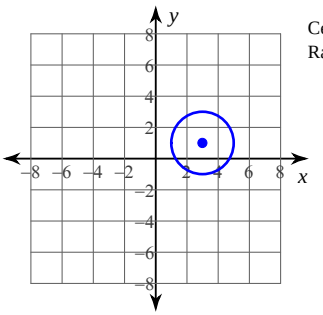
18) $y^2 - 2x + x^2 = -6y - 9$

A)



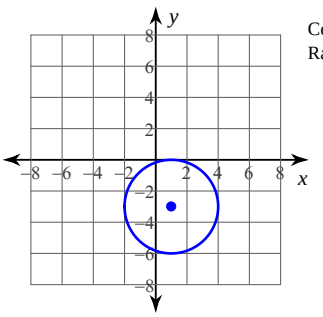
Center: (1, –3)
Radius: 2

B)



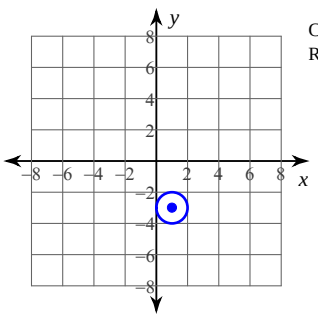
Center: (3, 1)
Radius: 2

C)



Center: (1, –3)
Radius: 3

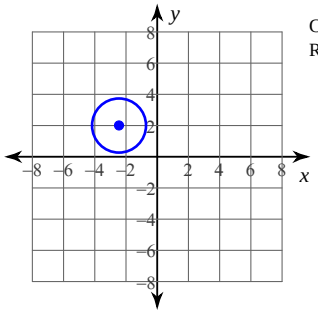
D)



Center: (1, –3)
Radius: 1

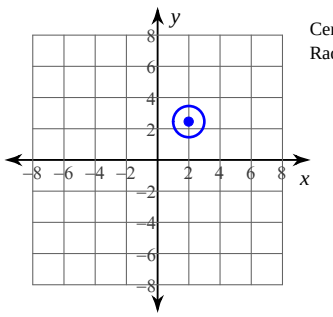
19) $x^2 - 2x\sqrt{6} + 7 = -4y - y^2$

A)



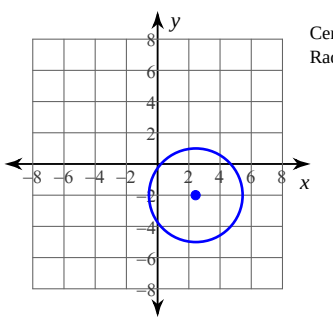
Center: $(-\sqrt{6}, 2)$
Radius: $\sqrt{3}$

B)



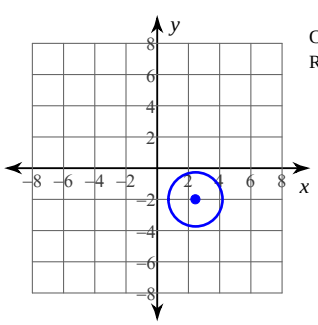
Center: $(2, \sqrt{6})$
Radius: 1

C)



Center: $(\sqrt{6}, -2)$
Radius: 3

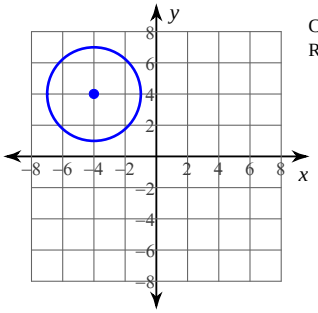
D)



Center: $(\sqrt{6}, -2)$
Radius: $\sqrt{3}$

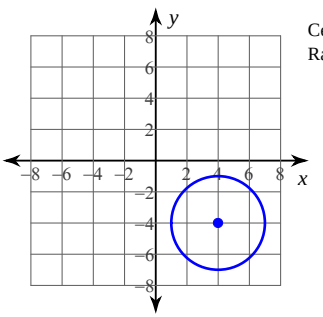
20) $8x = -23 + 8y - y^2 - x^2$

A)



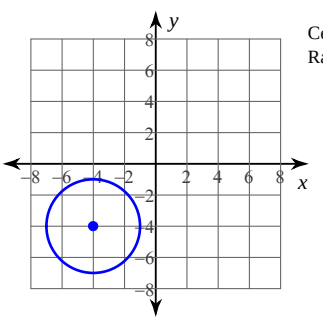
Center: $(-4, 4)$
Radius: 3

B)



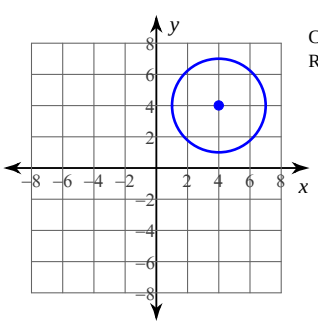
Center: $(4, -4)$
Radius: 3

C)



Center: $(-4, -4)$
Radius: 3

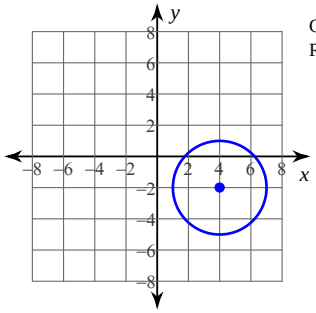
D)



Center: $(4, 4)$
Radius: 3

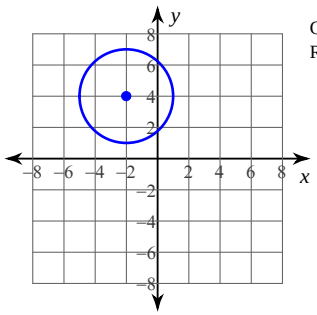
21) $x^2 + y^2 + 11 = -8y + 4x$

A)



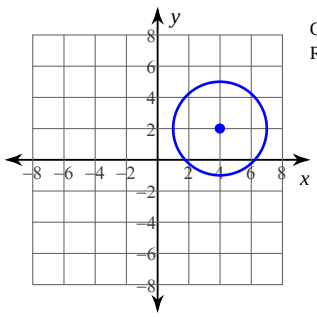
Center: (4, –2)
Radius: 3

B)



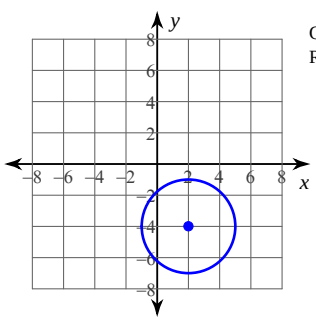
Center: (–2, 4)
Radius: 3

C)



Center: (4, 2)
Radius: 3

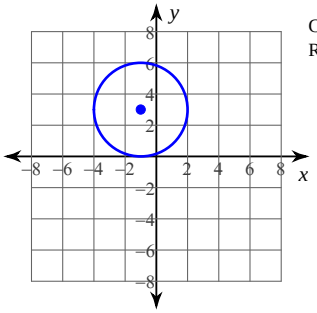
D)



Center: (2, –4)
Radius: 3

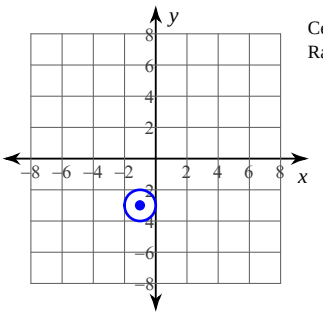
22) $6y + x^2 = -1 - y^2 - 2x$

A)



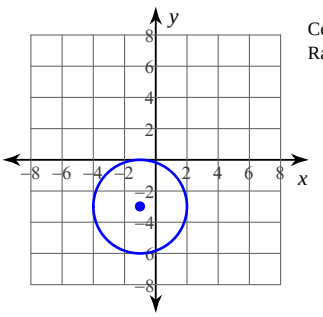
Center: (–1, 3)
Radius: 3

B)



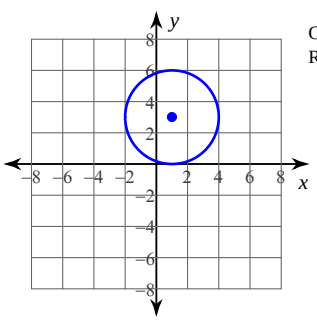
Center: (–1, –3)
Radius: 1

C)



Center: (–1, –3)
Radius: 3

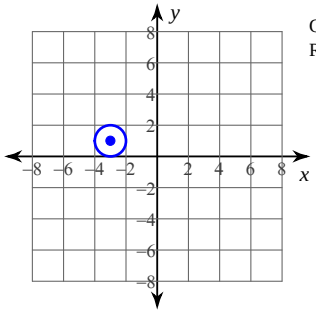
D)



Center: (1, 3)
Radius: 3

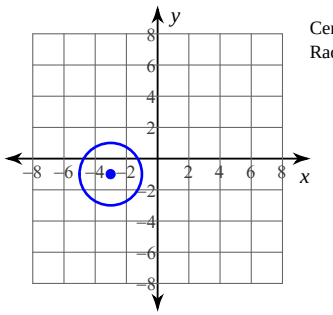
23) $y^2 + x^2 + 6x + 2y = -6$

A)



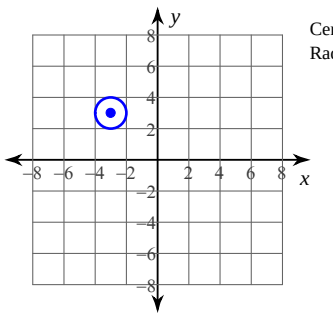
Center: (–3, 1)
Radius: 1

B)



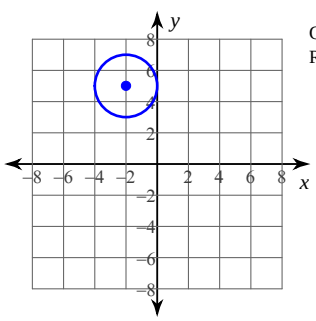
Center: (–3, –1)
Radius: 2

C)



Center: (–3, 3)
Radius: 1

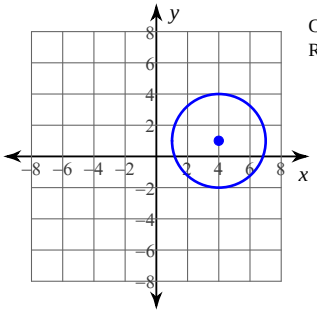
D)



Center: (–2, 5)
Radius: 2

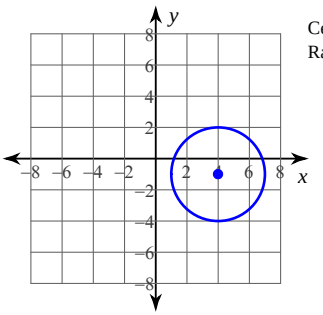
24) $0 = -x^2 - 8 + 8x - 2y - y^2$

A)



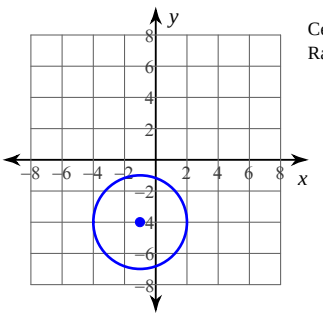
Center: (4, 1)
Radius: 3

B)



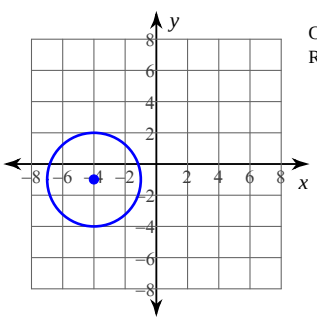
Center: (4, –1)
Radius: 3

C)



Center: (–1, –4)
Radius: 3

D)



Center: (–4, –1)
Radius: 3

Answers to Assignment (ID: 6)

1) C
2) D
3) A
4) A
5) D
6) A
7) C
8) C
9) D
10) D
11) C
12) C
13) A
14) D
15) D
16) C
17) A
18) D
19) D
20) A
21) D
22) C
23) B
24) B

Geometry Name_____

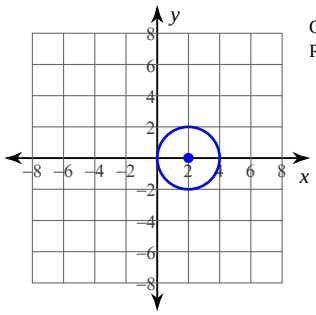
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

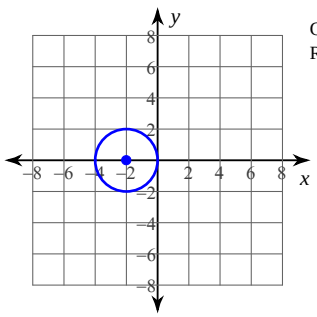
1) $-4x + x^2 + y^2 = 0$

A)



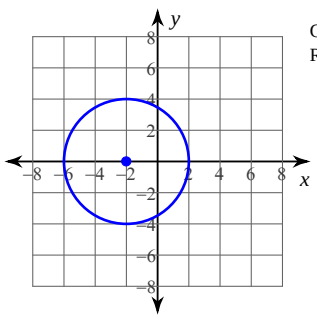
Center: (2, 0)
Radius: 2

B)



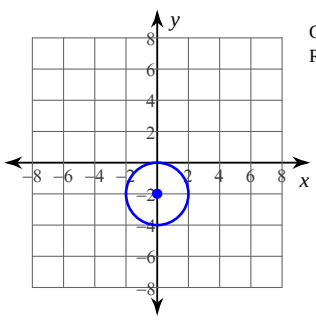
Center: (−2, 0)
Radius: 2

C)



Center: (−2, 0)
Radius: 4

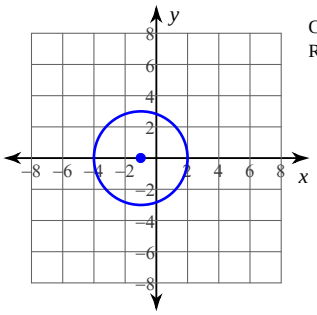
D)



Center: (0, −2)
Radius: 2

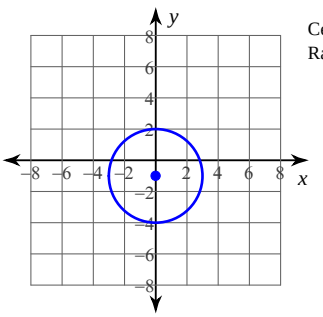
2) $y^2 = 2y + 8 - x^2$

A)



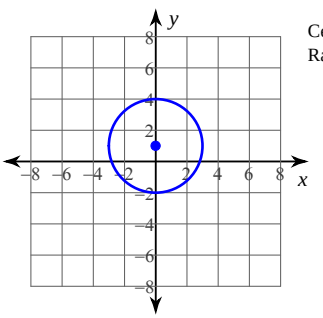
Center: (−1, 0)
Radius: 3

B)



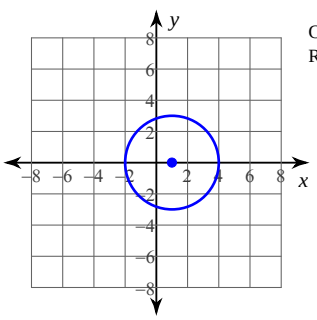
Center: (0, −1)
Radius: 3

C)



Center: (0, 1)
Radius: 3

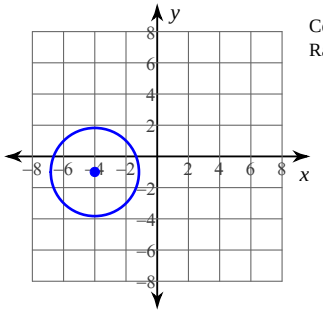
D)



Center: (1, 0)
Radius: 3

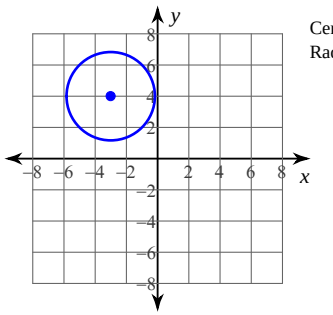
3) $-6y + 17 + 8x + y^2 = -x^2$

A)



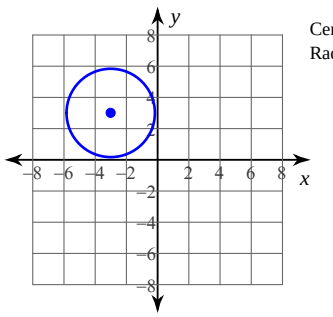
Center: $(-4, -1)$
Radius: $2\sqrt{2}$

B)



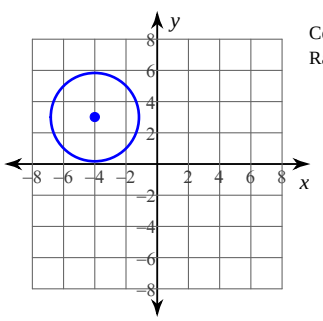
Center: $(-3, 4)$
Radius: $2\sqrt{2}$

C)



Center: $(-3, 3)$
Radius: $2\sqrt{2}$

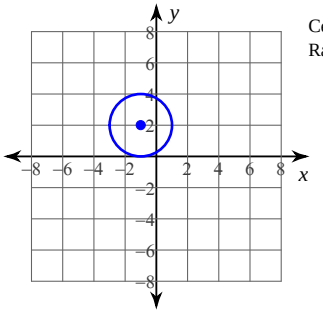
D)



Center: $(-4, 3)$
Radius: $2\sqrt{2}$

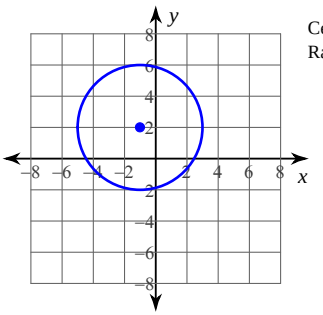
4) $2x + y^2 = -1 + 4y - x^2$

A)



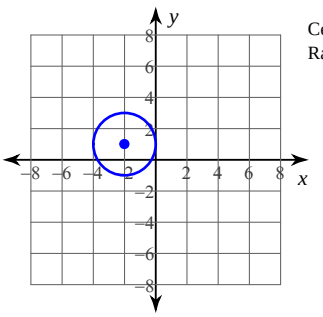
Center: $(-1, 2)$
Radius: 2

B)



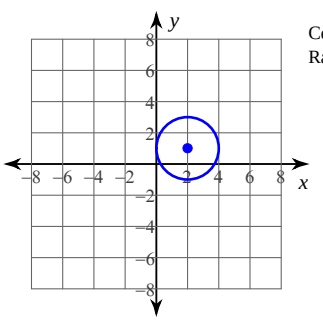
Center: $(-1, 2)$
Radius: 4

C)



Center: $(-2, 1)$
Radius: 2

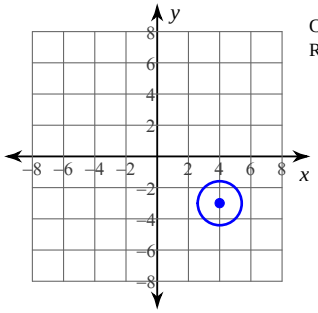
D)



Center: $(2, 1)$
Radius: 2

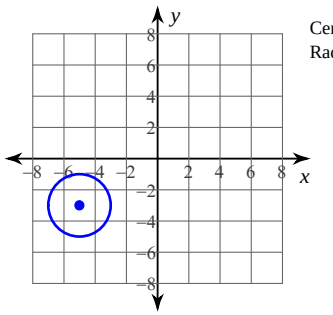
5) $-8y - 6x = -x^2 - y^2 - 23$

A)



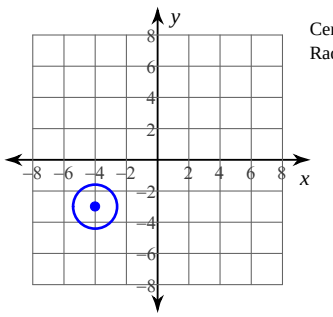
Center: $(4, -3)$
Radius: $\sqrt{2}$

B)



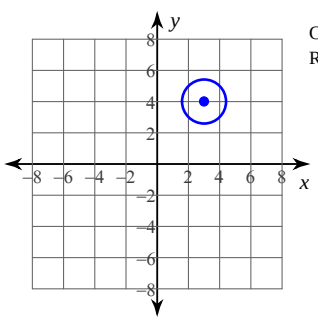
Center: $(-5, -3)$
Radius: 2

C)



Center: $(-4, -3)$
Radius: $\sqrt{2}$

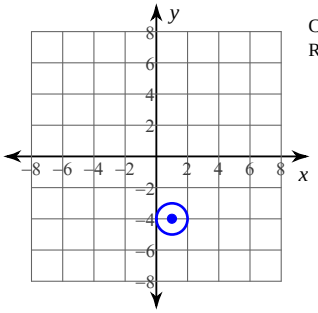
D)



Center: $(3, 4)$
Radius: $\sqrt{2}$

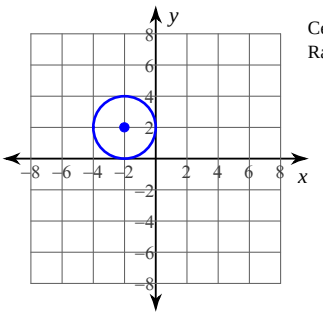
6) $16 - 2x + y^2 + 8y = -x^2$

A)



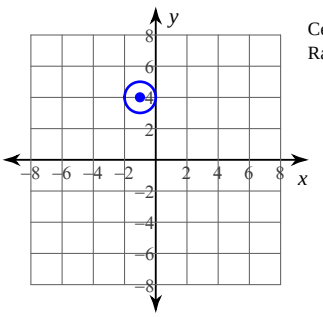
Center: $(1, -4)$
Radius: 1

B)



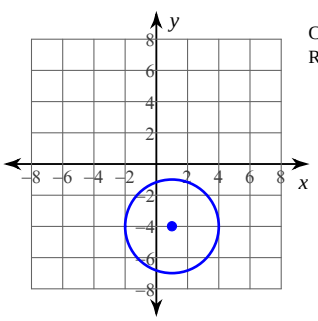
Center: $(-2, 2)$
Radius: 2

C)



Center: $(-1, 4)$
Radius: 1

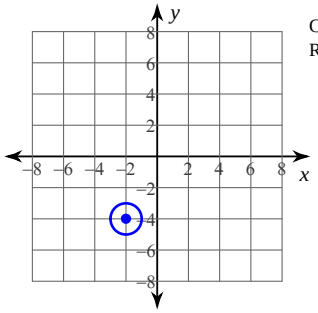
D)



Center: $(1, -4)$
Radius: 3

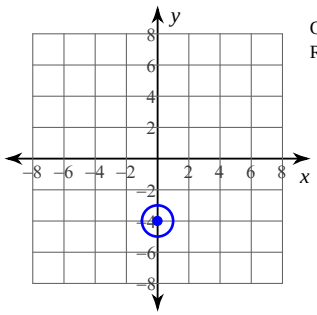
7) $15 + y^2 + x^2 = -8y$

A)



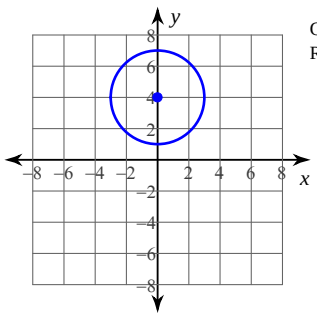
Center: (–2, –4)
Radius: 1

B)



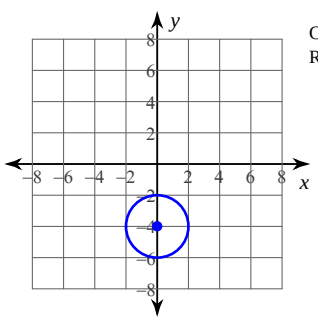
Center: (0, –4)
Radius: 1

C)



Center: (0, 4)
Radius: 3

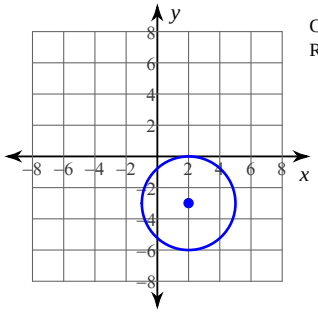
D)



Center: (0, –4)
Radius: 2

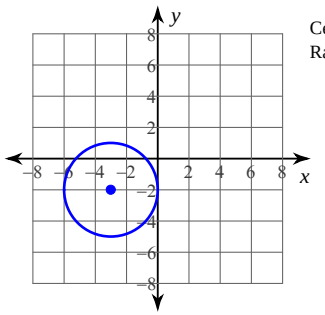
8) $x^2 = -y^2 - 6x - 4y - 4$

A)



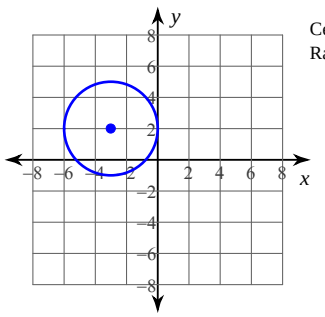
Center: (2, –3)
Radius: 3

B)



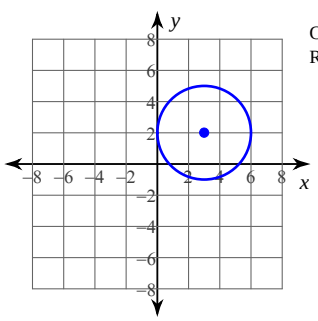
Center: (–3, –2)
Radius: 3

C)



Center: (–3, 2)
Radius: 3

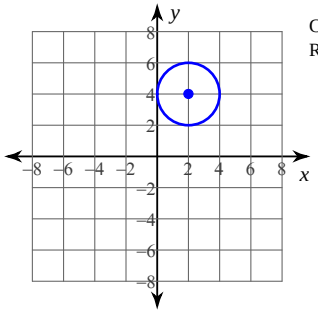
D)



Center: (3, 2)
Radius: 3

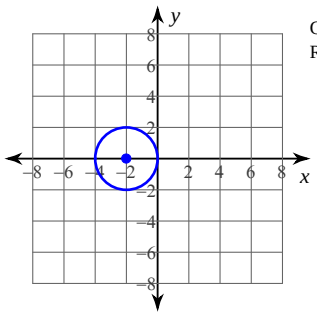
9) $16 - 8x + x^2 = -y^2 - 4y$

A)



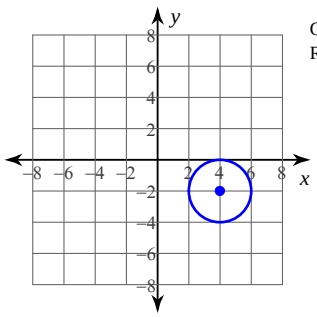
Center: (2, 4)
Radius: 2

B)



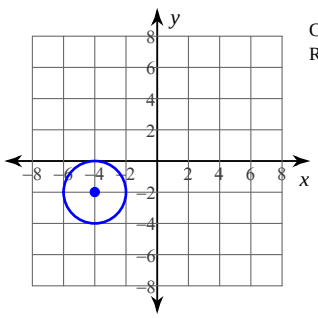
Center: (−2, 0)
Radius: 2

C)



Center: (4, −2)
Radius: 2

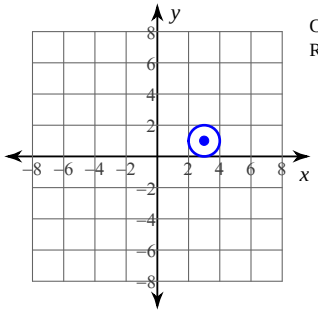
D)



Center: (−4, −2)
Radius: 2

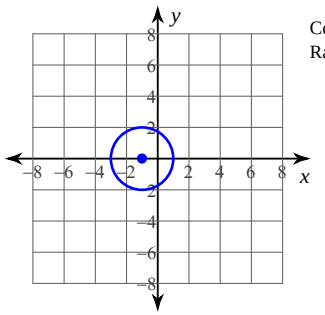
10) $2y - 6x = -y^2 - x^2 - 2$

A)



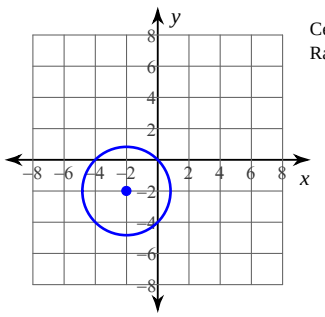
Center: (3, 1)
Radius: 1

B)



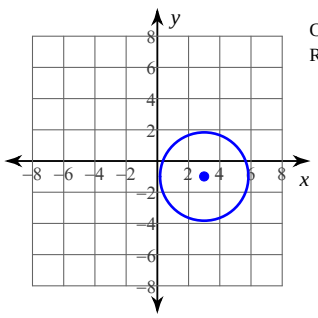
Center: (−1, 0)
Radius: 2

C)



Center: $(-2, -2)$
Radius: $2\sqrt{2}$

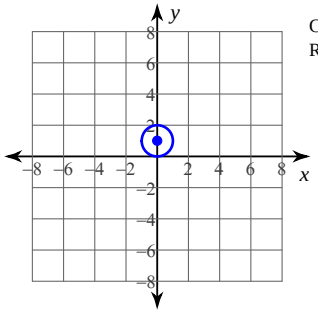
D)



Center: (3, −1)
Radius: $2\sqrt{2}$

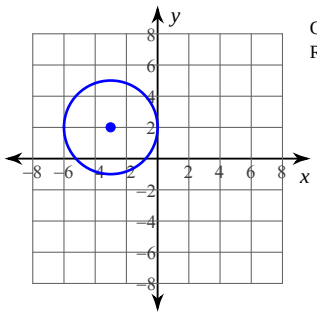
11) $-2y = -x^2 - y^2$

A)



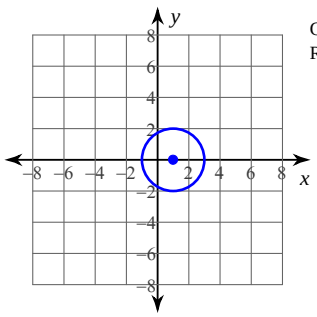
Center: (0, 1)
Radius: 1

B)



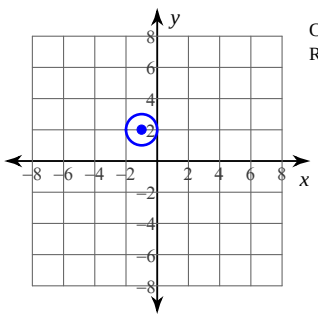
Center: (−3, 2)
Radius: 3

C)



Center: (1, 0)
Radius: 2

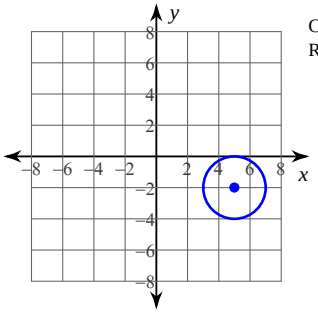
D)



Center: (−1, 2)
Radius: 1

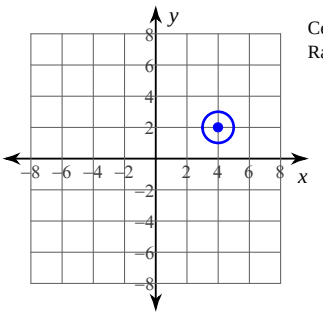
12) $6x - 4y = -12 - y^2 - x^2$

A)



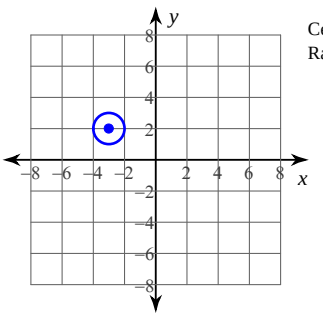
Center: (5, −2)
Radius: 2

B)



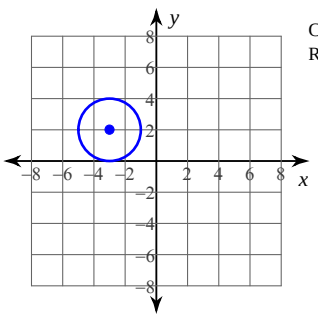
Center: (4, 2)
Radius: 1

C)



Center: (−3, 2)
Radius: 1

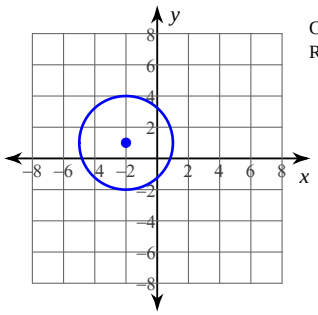
D)



Center: (−3, 2)
Radius: 2

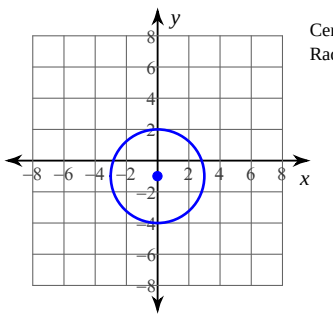
13) $-2y + y^2 + x^2 = 4 - 4x$

A)



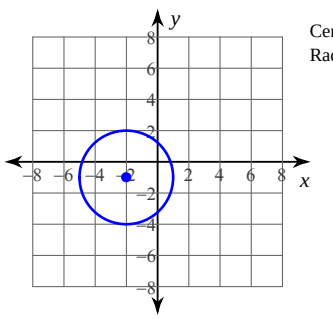
Center: $(-2, 1)$
Radius: 3

B)



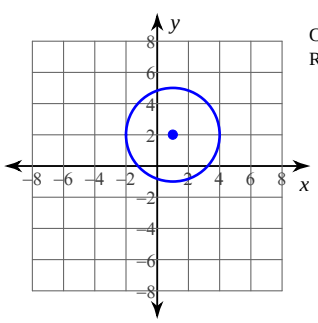
Center: $(0, -1)$
Radius: 3

C)



Center: $(-2, -1)$
Radius: 3

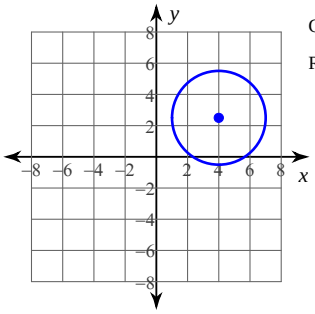
D)



Center: $(1, 2)$
Radius: 3

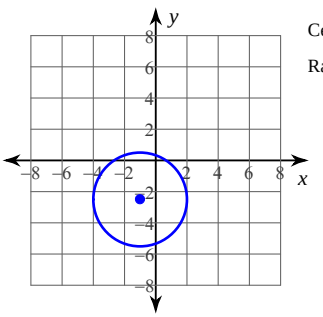
14) $4y^2 + 4x^2 + 49 - 28y = -24x$

A)



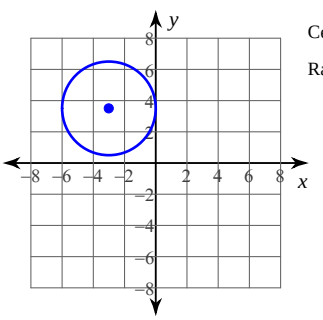
Center: $\left(4, \frac{5}{2}\right)$
Radius: 3

B)



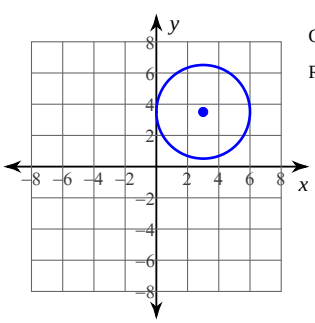
Center: $\left(-1, -\frac{5}{2}\right)$
Radius: 3

C)



Center: $\left(-3, \frac{7}{2}\right)$
Radius: 3

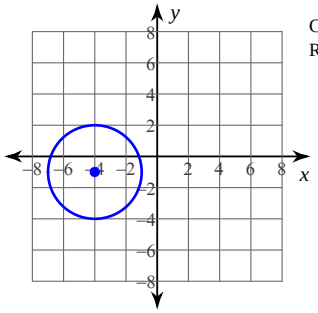
D)



Center: $\left(3, \frac{7}{2}\right)$
Radius: 3

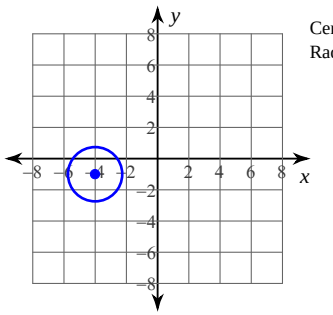
15) $14 - 8y + x^2 = 2x - y^2$

A)



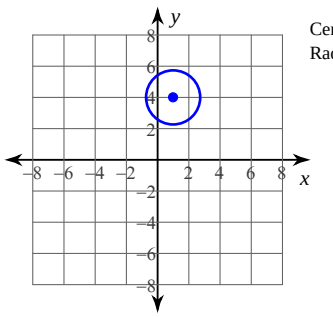
Center: $(-4, -1)$
Radius: 3

B)



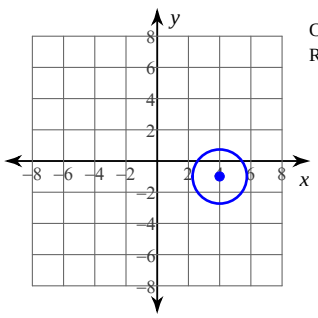
Center: $(-4, -1)$
Radius: $\sqrt{3}$

C)



Center: $(1, 4)$
Radius: $\sqrt{3}$

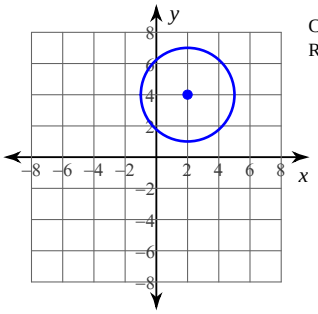
D)



Center: $(4, -1)$
Radius: $\sqrt{3}$

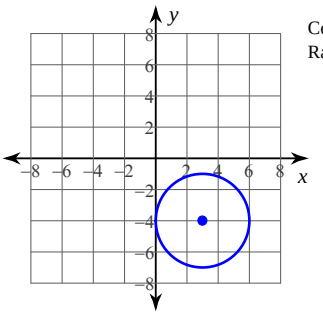
16) $(x+2)^2 + (y+4)^2 = 9$

A)



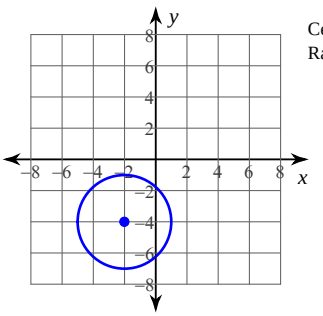
Center: $(2, 4)$
Radius: 3

B)



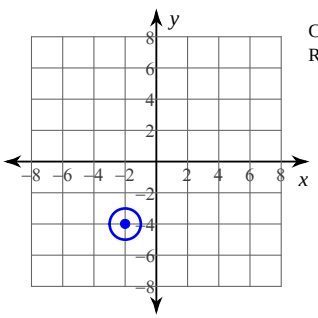
Center: $(3, -4)$
Radius: 3

C)



Center: $(-2, -4)$
Radius: 3

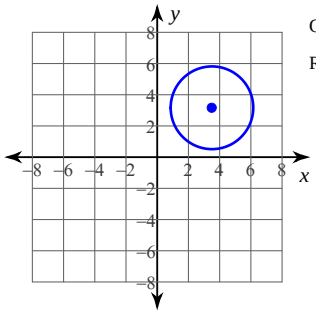
D)



Center: $(-2, -4)$
Radius: 1

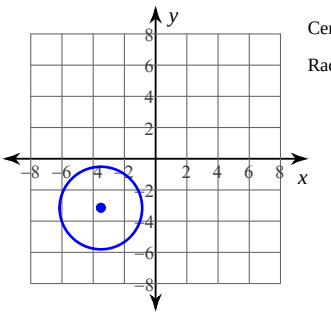
17) $4y^2 - 8x\sqrt{10} = -4x^2 - 28y - 61$

A)



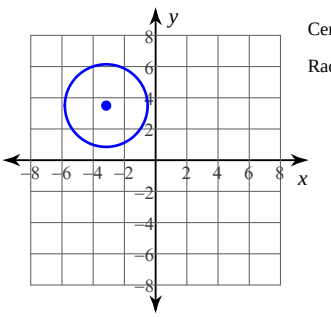
Center: $\left(\frac{7}{2}, \sqrt{10}\right)$
Radius: $\sqrt{7}$

B)



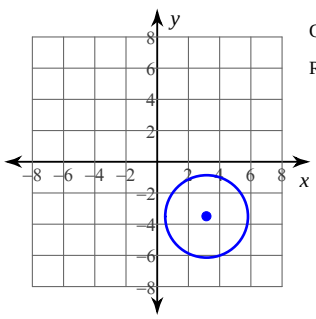
Center: $\left(-\frac{7}{2}, -\sqrt{10}\right)$
Radius: $\sqrt{7}$

C)



Center: $\left(-\sqrt{10}, \frac{7}{2}\right)$
Radius: $\sqrt{7}$

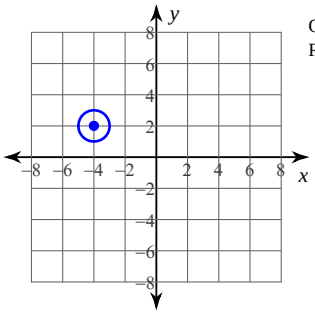
D)



Center: $\left(\sqrt{10}, -\frac{7}{2}\right)$
Radius: $\sqrt{7}$

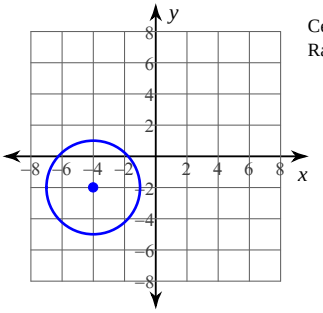
18) $(x+4)^2 + (y+2)^2 = 9$

A)



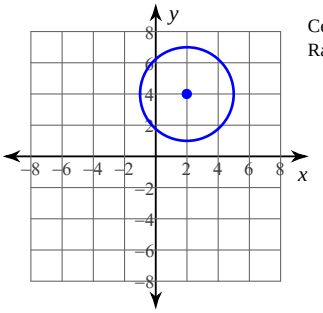
Center: (–4, 2)
Radius: 1

B)



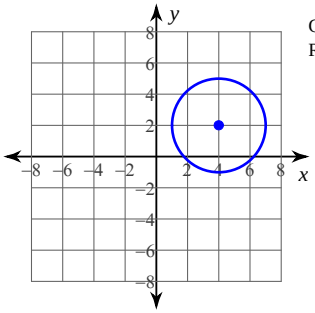
Center: (–4, –2)
Radius: 3

C)



Center: (2, 4)
Radius: 3

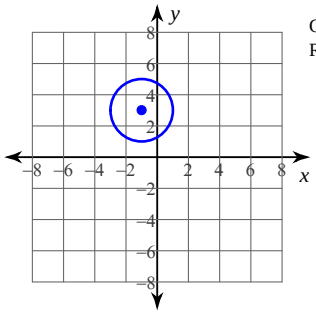
D)



Center: (4, 2)
Radius: 3

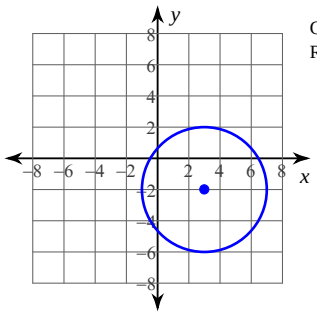
19) $(x-3)^2+(y+2)^2=4$

A)



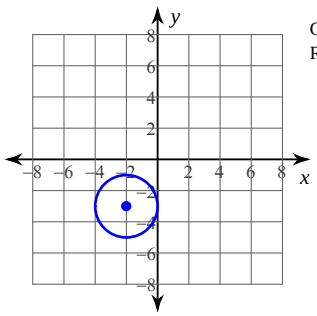
Center: (–1, 3)
Radius: 2

B)



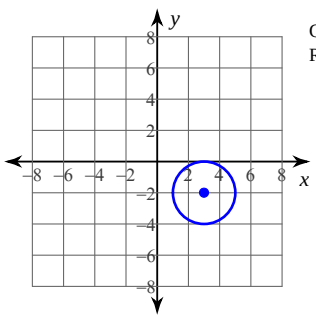
Center: (3, –2)
Radius: 4

C)



Center: (–2, –3)
Radius: 2

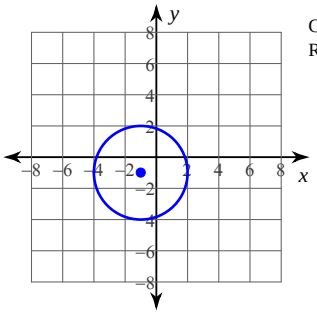
D)



Center: (3, –2)
Radius: 2

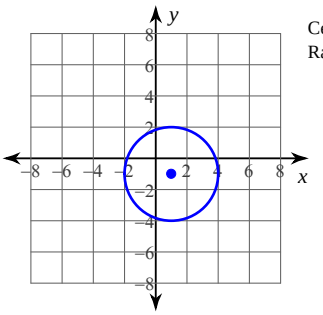
20) $(x-1)^2+(y+1)^2=9$

A)



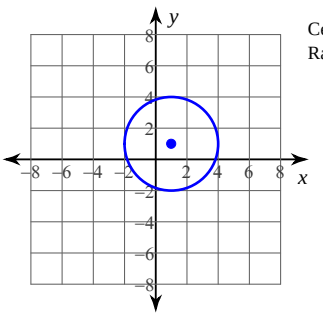
Center: (–1, –1)
Radius: 3

B)



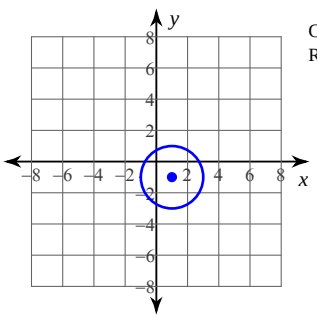
Center: (1, –1)
Radius: 3

C)



Center: (1, 1)
Radius: 3

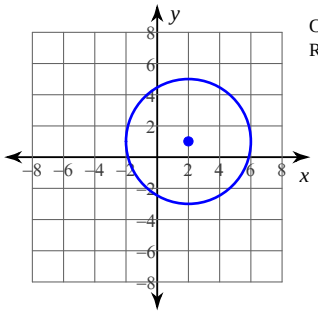
D)



Center: (1, –1)
Radius: 2

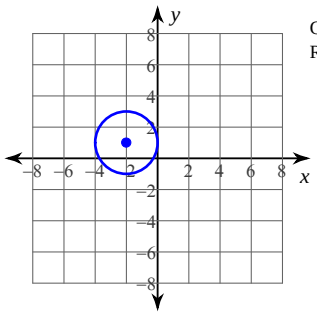
21) $(x+2)^2+(y-1)^2=4$

A)



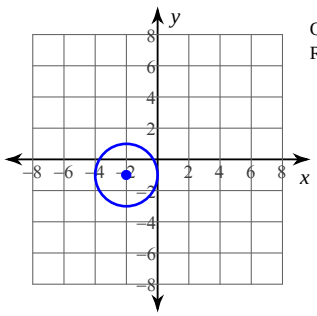
Center: (2, 1)
Radius: 4

B)



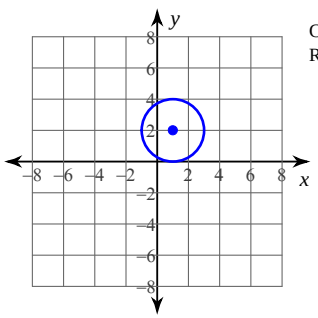
Center: (−2, 1)
Radius: 2

C)



Center: (−2, −1)
Radius: 2

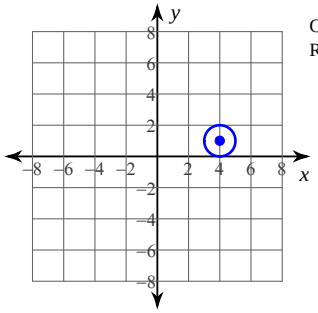
D)



Center: (1, 2)
Radius: 2

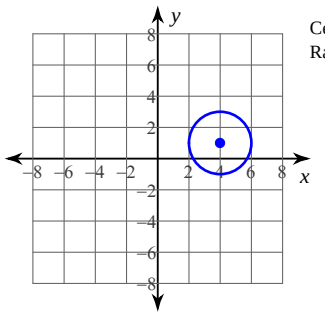
22) $x^2+y^2=8x+2y-13$

A)



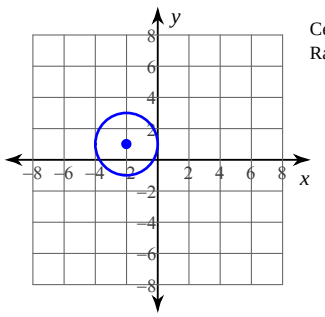
Center: (4, 1)
Radius: 1

B)



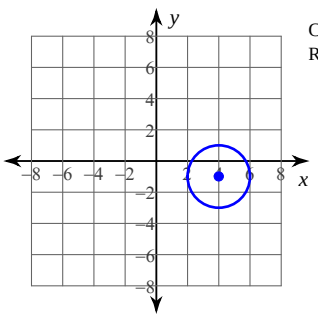
Center: (4, 1)
Radius: 2

C)



Center: (−2, 1)
Radius: 2

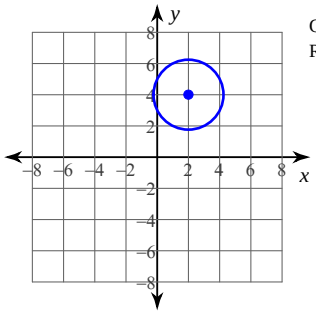
D)



Center: (4, −1)
Radius: 2

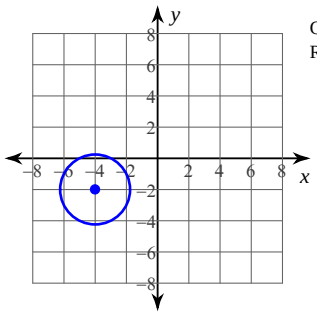
23) $(x-2)^2+(y-4)^2=5$

A)



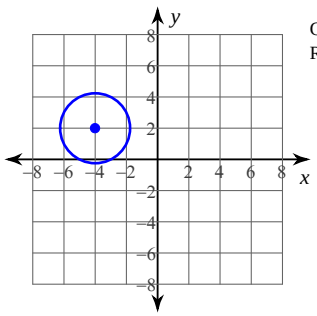
Center: (2, 4)
Radius: $\sqrt{5}$

B)



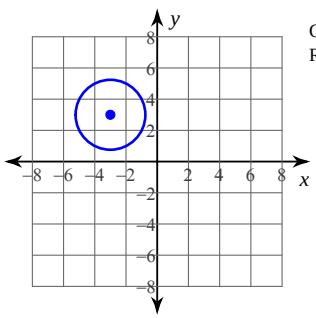
Center: (–4, –2)
Radius: $\sqrt{5}$

C)



Center: (–4, 2)
Radius: $\sqrt{5}$

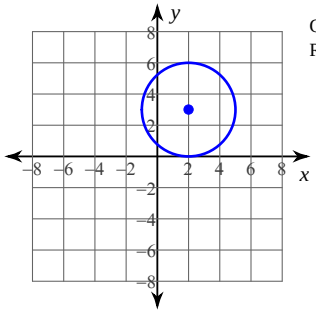
D)



Center: (–3, 3)
Radius: $\sqrt{5}$

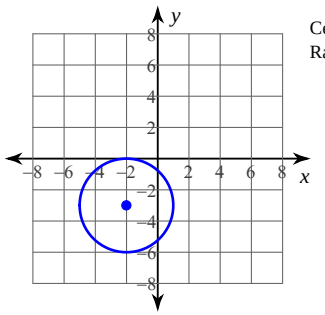
24) $x^2=-4+6y+4x-y^2$

A)



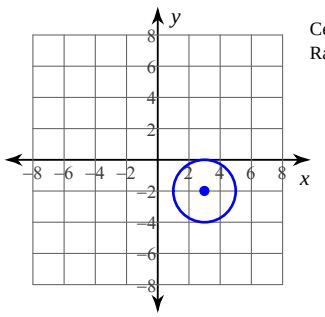
Center: (2, 3)
Radius: 3

B)



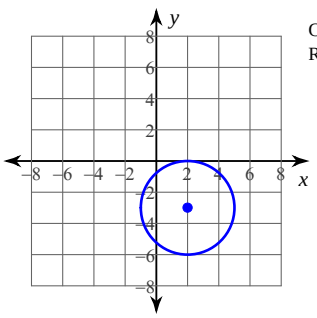
Center: (–2, –3)
Radius: 3

C)



Center: (3, –2)
Radius: 2

D)



Center: (2, –3)
Radius: 3

Answers to Assignment (ID: 7)

1) A
2) C
3) D
4) A
5) D
6) A
7) B
8) B
9) C
10) D
11) A
12) C
13) A
14) C
15) C
16) C
17) D
18) B
19) D
20) B
21) B
22) B
23) A
24) A

Geometry Name_____

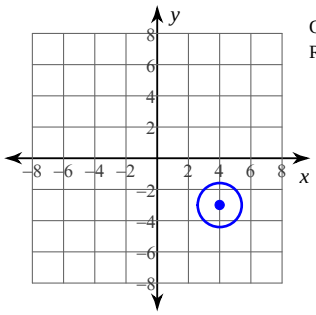
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

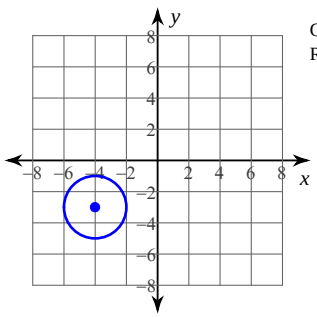
1) $23 = -x^2 - 6y - 8x - y^2$

A)



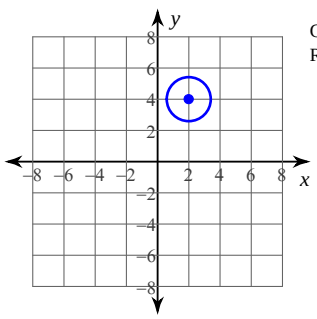
Center: $(4, -3)$
Radius: $\sqrt{2}$

B)



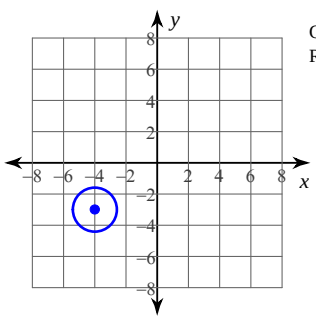
Center: $(-4, -3)$
Radius: 2

C)



Center: $(2, 4)$
Radius: $\sqrt{2}$

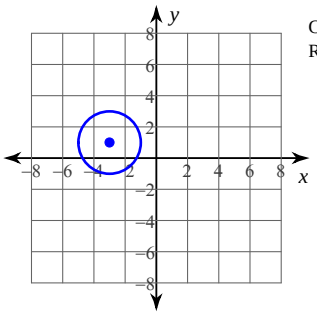
D)



Center: $(-4, -3)$
Radius: $\sqrt{2}$

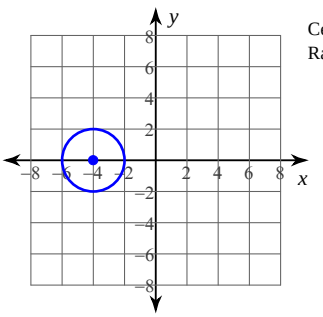
2) $y^2 + x^2 + 12 = 8y$

A)



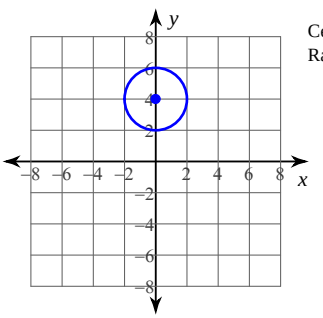
Center: $(-3, 1)$
Radius: 2

B)



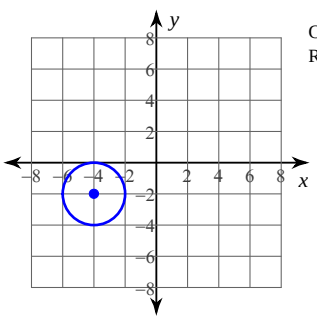
Center: $(-4, 0)$
Radius: 2

C)



Center: $(0, 4)$
Radius: 2

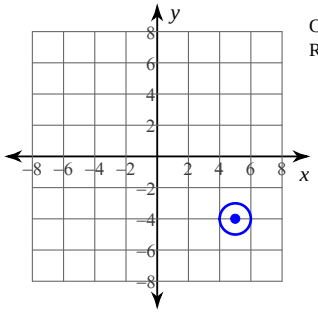
D)



Center: $(-4, -2)$
Radius: 2

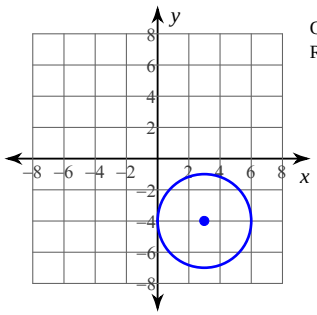
3) $-6x + 16 + x^2 = -8y - y^2$

A)



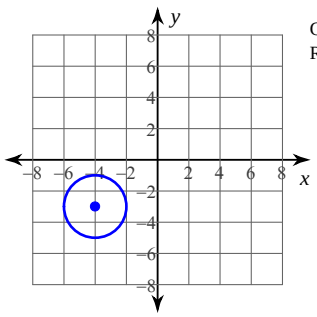
Center: $(5, -4)$
Radius: 1

B)



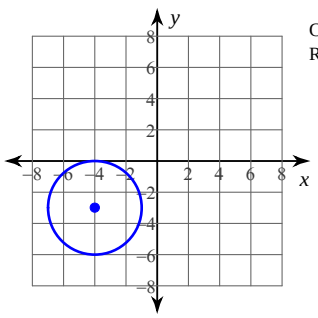
Center: $(3, -4)$
Radius: 3

C)



Center: $(-4, -3)$
Radius: 2

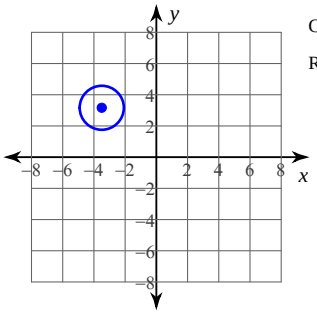
D)



Center: $(-4, -3)$
Radius: 3

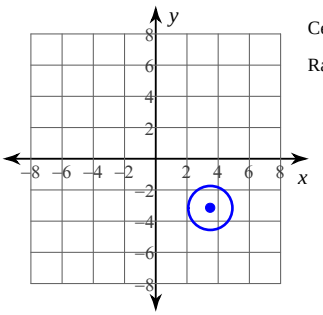
4) $4x^2 = 8y\sqrt{10} + 28x - 4y^2 - 81$

A)



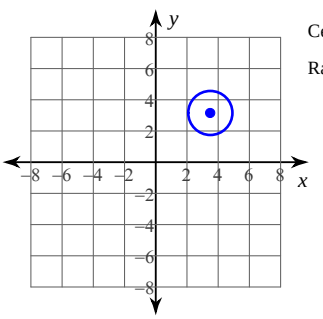
Center: $\left(-\frac{7}{2}, \sqrt{10}\right)$
Radius: $\sqrt{2}$

B)



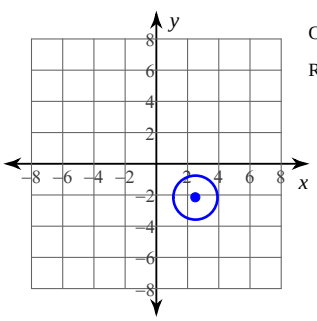
Center: $\left(\frac{7}{2}, -\sqrt{10}\right)$
Radius: $\sqrt{2}$

C)



Center: $\left(\frac{7}{2}, \sqrt{10}\right)$
Radius: $\sqrt{2}$

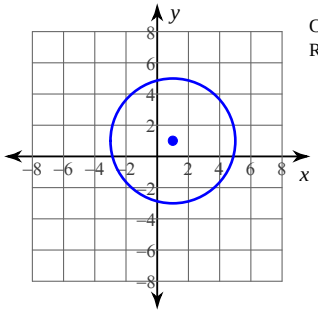
D)



Center: $\left(\frac{5}{2}, -\sqrt{10} + 1\right)$
Radius: $\sqrt{2}$

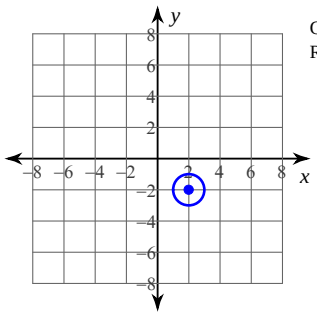
5) $y^2 - 4x = -4y - x^2 - 4$

A)



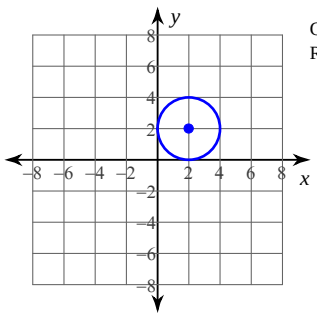
Center: (1, 1)
Radius: 4

B)



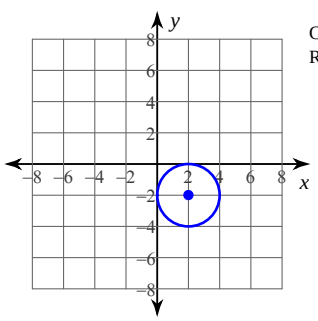
Center: (2, –2)
Radius: 1

C)



Center: (2, 2)
Radius: 2

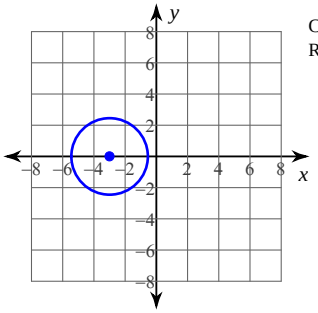
D)



Center: (2, –2)
Radius: 2

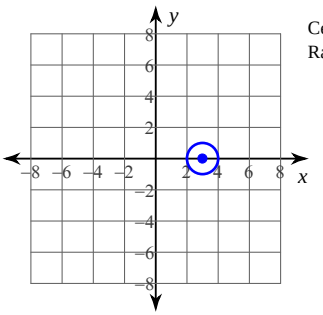
6) $0 = -y^2 - x^2 - 3 - 6x$

A)



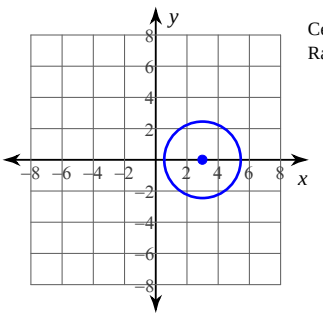
Center: (–3, 0)
Radius: $\sqrt{6}$

B)



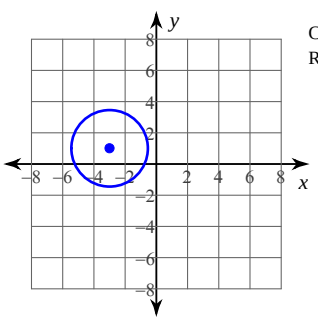
Center: (3, 0)
Radius: 1

C)



Center: (3, 0)
Radius: $\sqrt{6}$

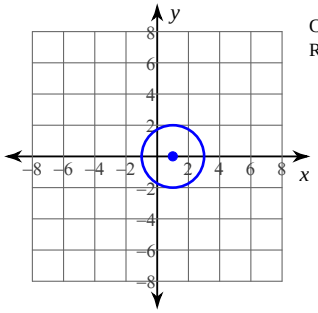
D)



Center: (–3, 1)
Radius: $\sqrt{6}$

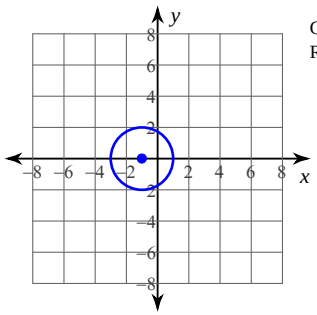
7) $2x + y^2 - 3 = -x^2$

A)



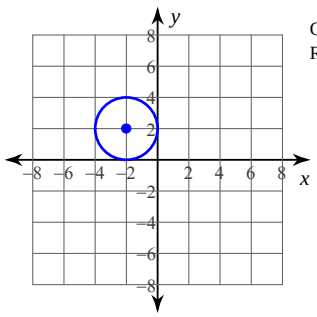
Center: (1, 0)
Radius: 2

B)



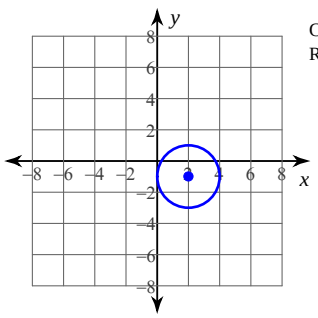
Center: (−1, 0)
Radius: 2

C)



Center: (−2, 2)
Radius: 2

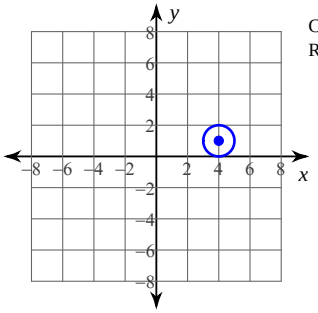
D)



Center: (2, −1)
Radius: 2

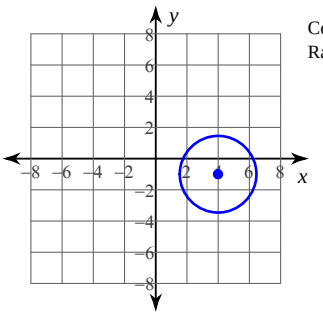
8) $x^2 - 2y + 11 + y^2 = -8x$

A)



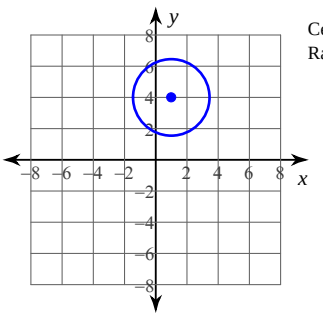
Center: (4, 1)
Radius: 1

B)



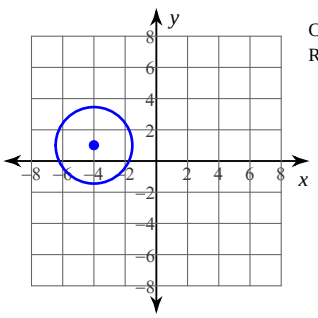
Center: (4, −1)
Radius: $\sqrt{6}$

C)



Center: (1, 4)
Radius: $\sqrt{6}$

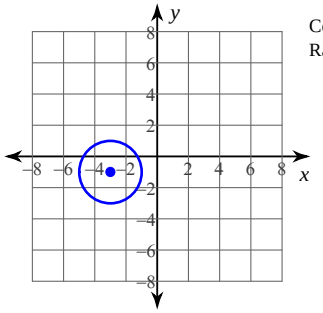
D)



Center: (−4, 1)
Radius: $\sqrt{6}$

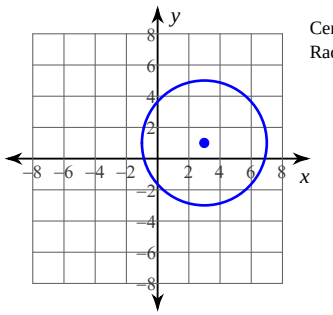
9) $-6x - 2y = -6 - x^2 - y^2$

A)



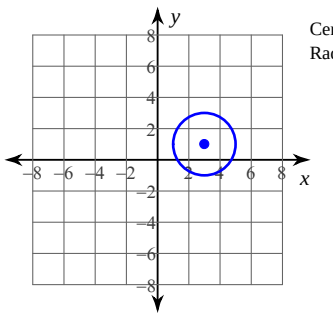
Center: (–3, –1)
Radius: 2

B)



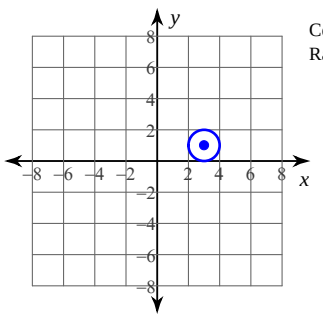
Center: (3, 1)
Radius: 4

C)



Center: (3, 1)
Radius: 2

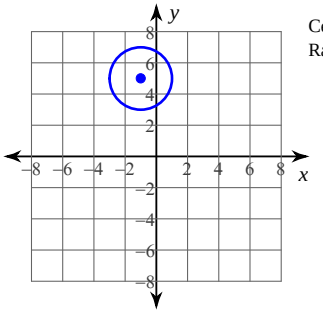
D)



Center: (3, 1)
Radius: 1

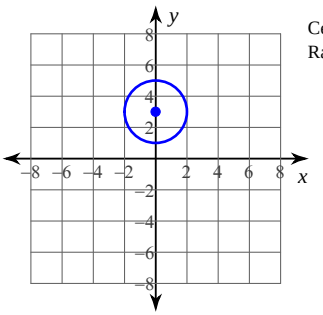
10) $5 + x^2 - 6y = -y^2$

A)



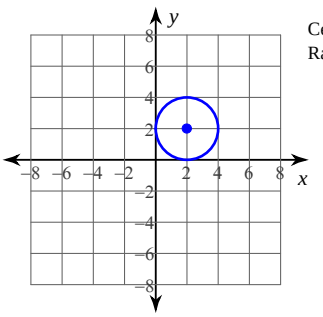
Center: (–1, 5)
Radius: 2

B)



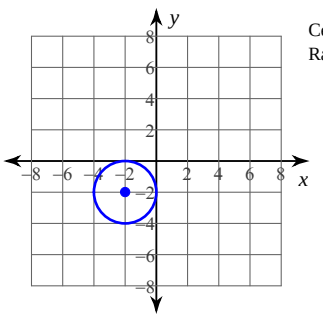
Center: (0, 3)
Radius: 2

C)



Center: (2, 2)
Radius: 2

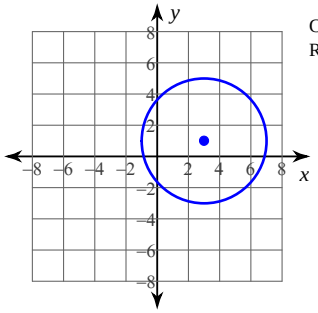
D)



Center: (–2, –2)
Radius: 2

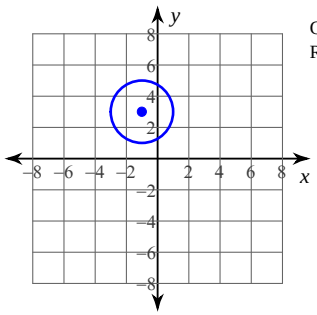
11) $y^2 - 6y + 2x + x^2 = -6$

A)



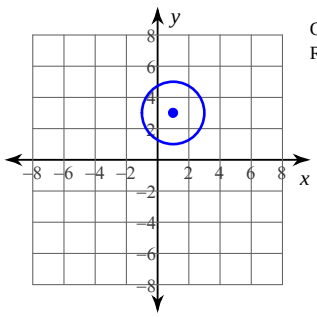
Center: (3, 1)
Radius: 4

B)



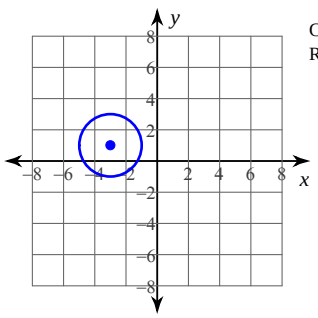
Center: (–1, 3)
Radius: 2

C)



Center: (1, 3)
Radius: 2

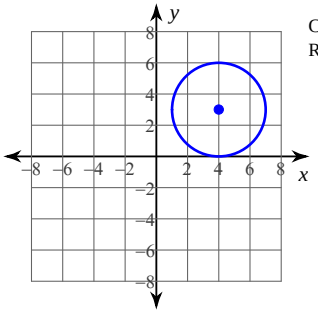
D)



Center: (–3, 1)
Radius: 2

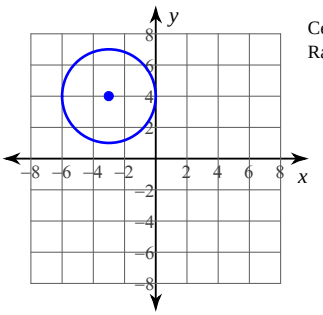
12) $x^2 + 16 + 6x = -y^2 + 8y$

A)



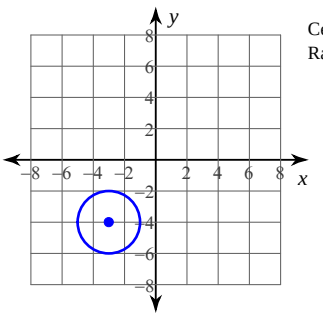
Center: (4, 3)
Radius: 3

B)



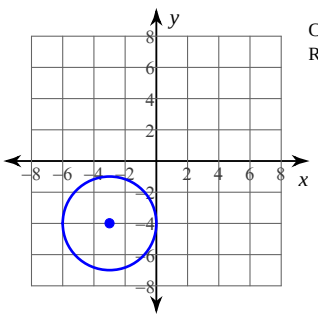
Center: (–3, 4)
Radius: 3

C)



Center: (–3, –4)
Radius: 2

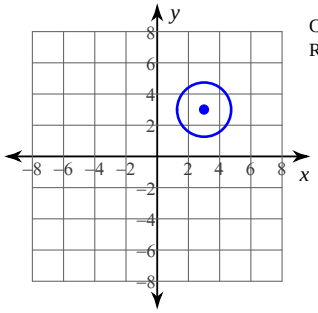
D)



Center: (–3, –4)
Radius: 3

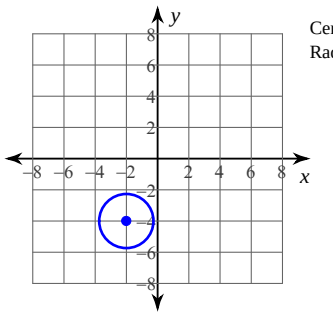
13) $6y + 22 = -y^2 - x^2 + 8x$

A)



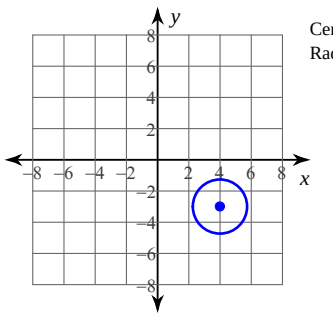
Center: $(3, 3)$
Radius: $\sqrt{3}$

B)



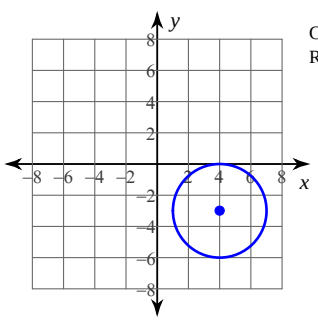
Center: $(-2, -4)$
Radius: $\sqrt{3}$

C)



Center: $(4, -3)$
Radius: $\sqrt{3}$

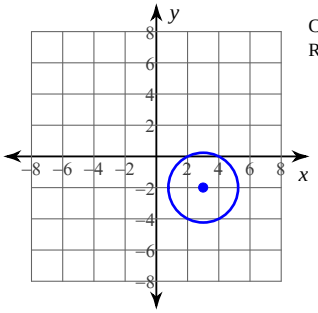
D)



Center: $(4, -3)$
Radius: 3

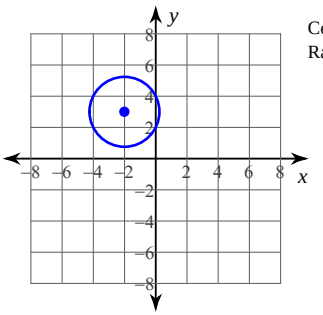
14) $8 + y^2 = -6y - x^2 + 4x$

A)



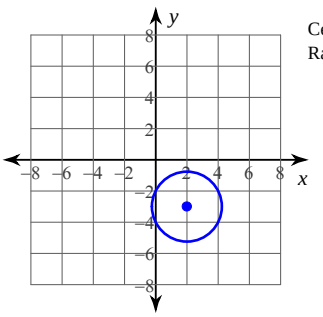
Center: $(3, -2)$
Radius: $\sqrt{5}$

B)



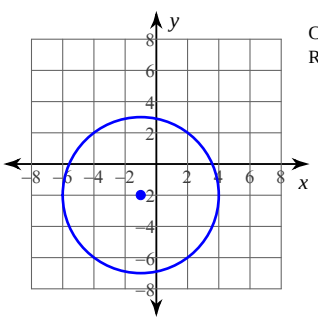
Center: $(-2, 3)$
Radius: $\sqrt{5}$

C)



Center: $(2, -3)$
Radius: $\sqrt{5}$

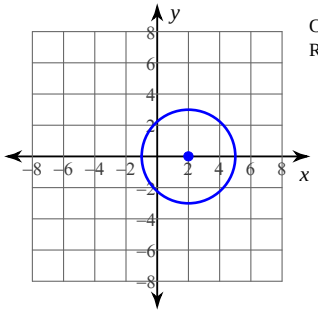
D)



Center: $(-1, -2)$
Radius: 5

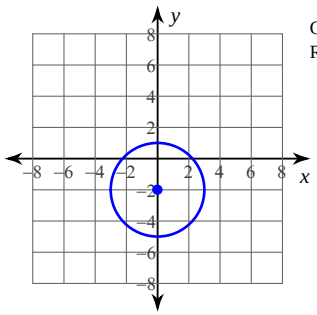
15) $4y + x^2 - 5 = -y^2$

A)



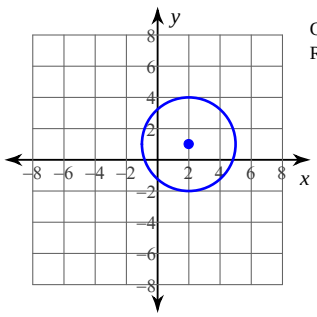
Center: (2, 0)
Radius: 3

B)



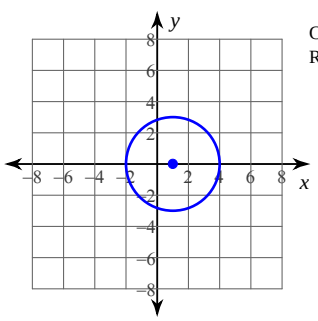
Center: (0, –2)
Radius: 3

C)



Center: (2, 1)
Radius: 3

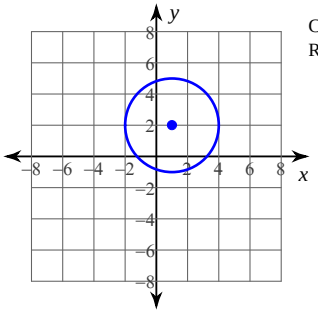
D)



Center: (1, 0)
Radius: 3

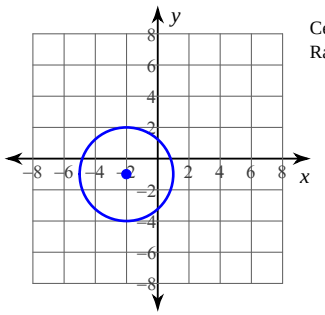
16) $y^2 = -4x - x^2 + 4 - 2y$

A)



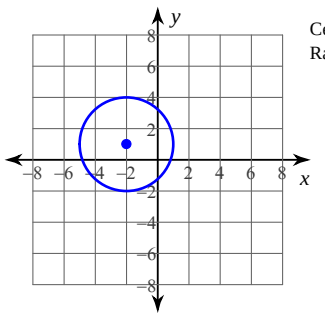
Center: (1, 2)
Radius: 3

B)



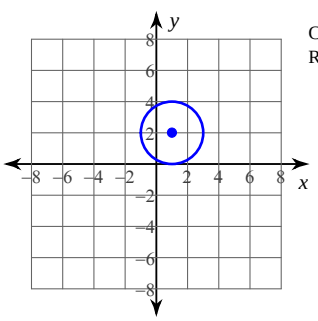
Center: (–2, –1)
Radius: 3

C)



Center: (–2, 1)
Radius: 3

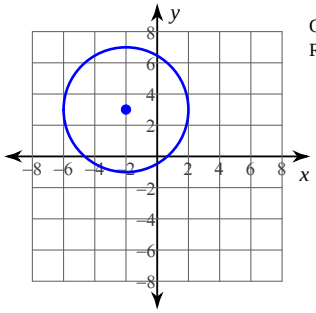
D)



Center: (1, 2)
Radius: 2

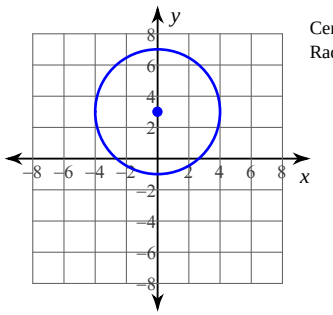
17) $-7 = 6x - y^2 - x^2$

A)



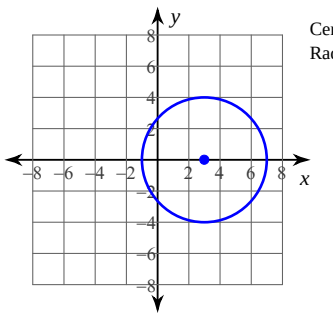
Center: $(-2, 3)$
Radius: 4

B)



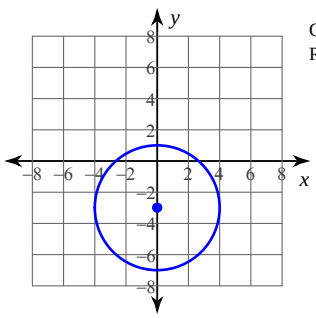
Center: $(0, 3)$
Radius: 4

C)



Center: $(3, 0)$
Radius: 4

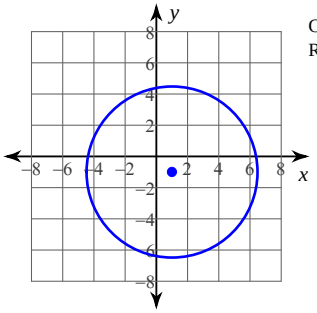
D)



Center: $(0, -3)$
Radius: 4

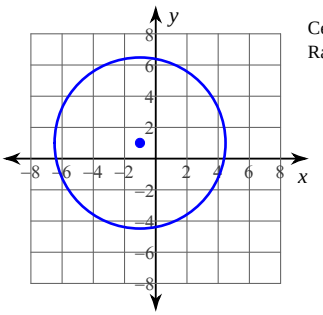
18) $-28 + y^2 + 2x + x^2 = 2y$

A)



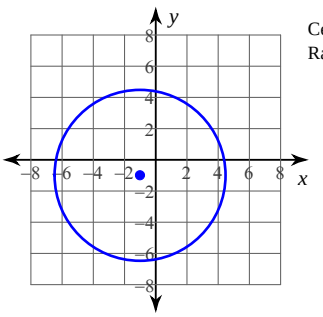
Center: $(1, -1)$
Radius: $\sqrt{30}$

B)



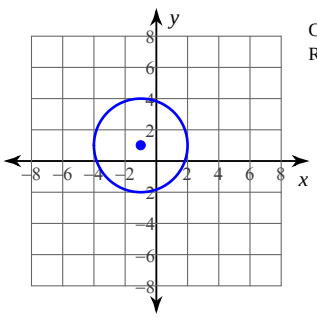
Center: $(-1, 1)$
Radius: $\sqrt{30}$

C)



Center: $(-1, -1)$
Radius: $\sqrt{30}$

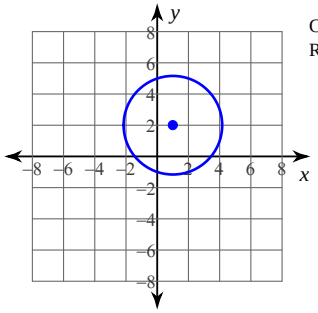
D)



Center: $(-1, 1)$
Radius: 3

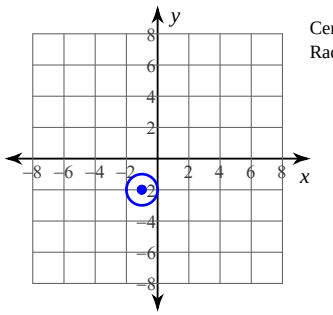
19) $-5 - 2x = 4y - y^2 - x^2$

A)



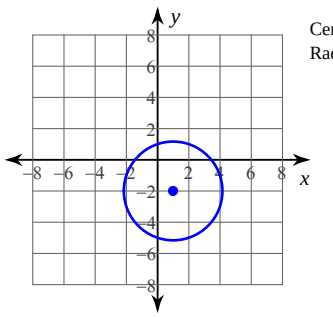
Center: $(1, 2)$
Radius: $\sqrt{10}$

B)



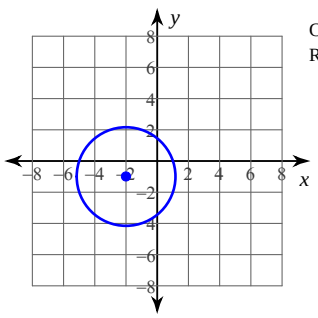
Center: $(-1, -2)$
Radius: 1

C)



Center: $(1, -2)$
Radius: $\sqrt{10}$

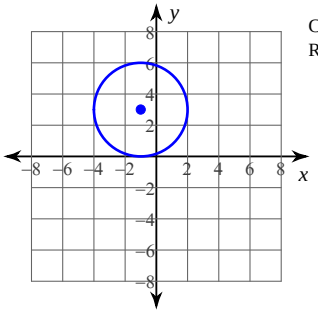
D)



Center: $(-2, -1)$
Radius: $\sqrt{10}$

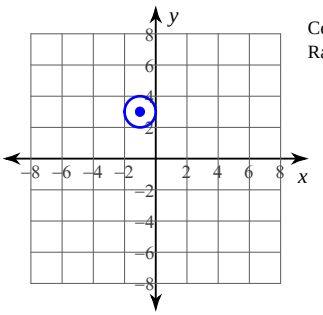
20) $y^2 + 9 + x^2 = -2x + 6y$

A)



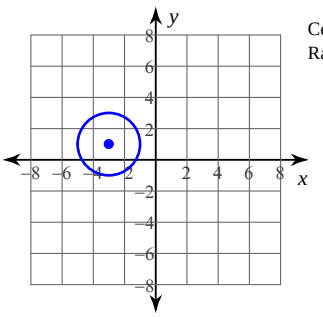
Center: $(-1, 3)$
Radius: 3

B)



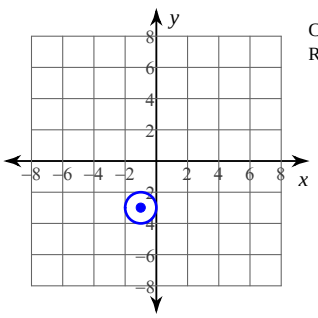
Center: $(-1, 3)$
Radius: 1

C)



Center: $(-3, 1)$
Radius: 2

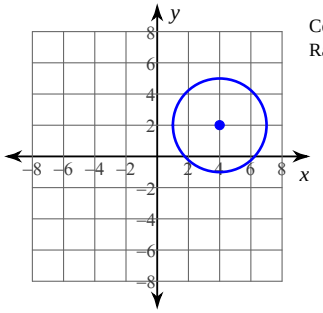
D)



Center: $(-1, -3)$
Radius: 1

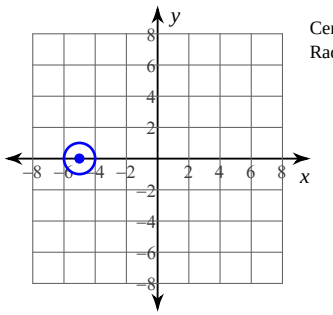
21) $8y - 4x + 19 + x^2 = -y^2$

A)



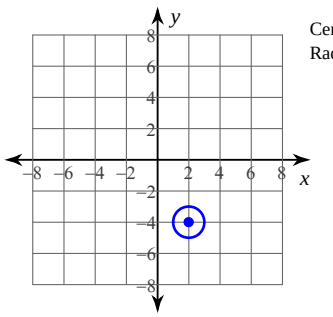
Center: (4, 2)
Radius: 3

B)



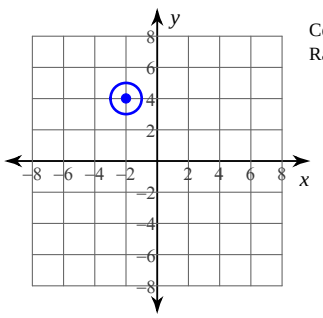
Center: (−5, 0)
Radius: 1

C)



Center: (2, −4)
Radius: 1

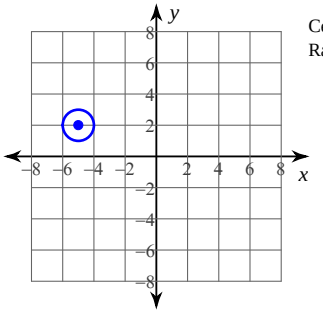
D)



Center: (−2, 4)
Radius: 1

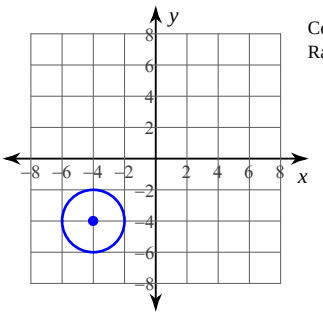
22) $x^2 + 28 = 8x - y^2 - 8y$

A)



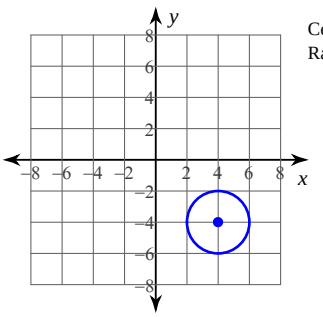
Center: (−5, 2)
Radius: 1

B)



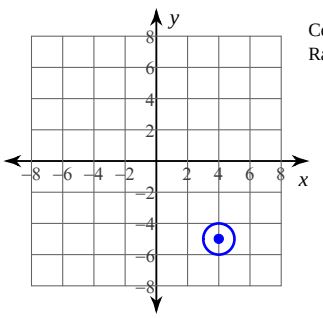
Center: (−4, −4)
Radius: 2

C)



Center: (4, −4)
Radius: 2

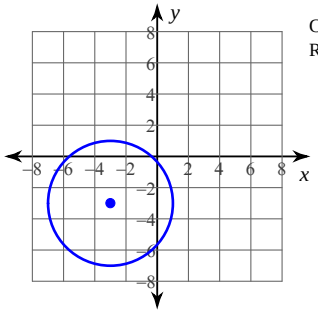
D)



Center: (4, −5)
Radius: 1

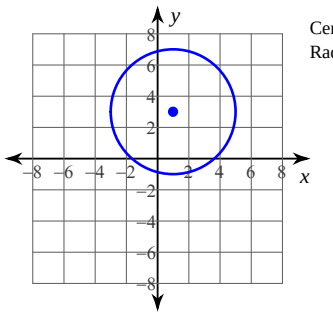
23) $-6y + 6x = -y^2 - 2 - x^2$

A)



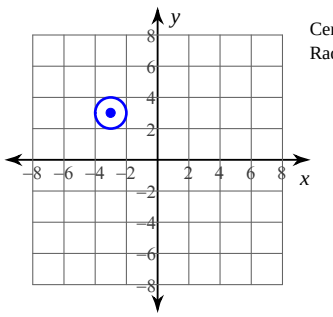
Center: $(-3, -3)$
Radius: 4

B)



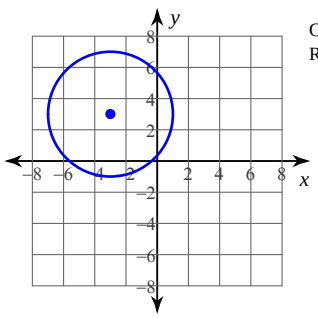
Center: $(1, 3)$
Radius: 4

C)



Center: $(-3, 3)$
Radius: 1

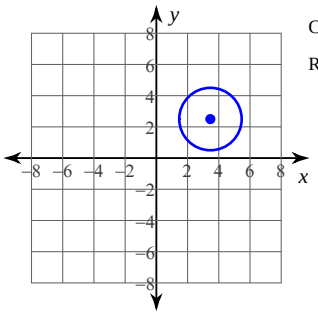
D)



Center: $(-3, 3)$
Radius: 4

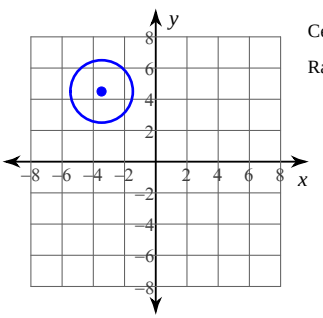
24) $\left(x - 2\sqrt{3}\right)^2 + \left(y + \frac{5}{2}\right)^2 = 4$

A)



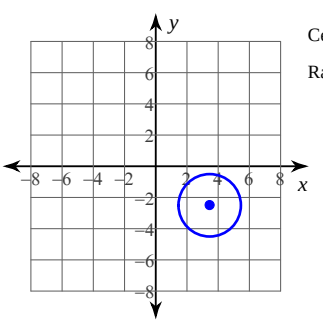
Center: $\left(2\sqrt{3}, \frac{5}{2}\right)$
Radius: 2

B)



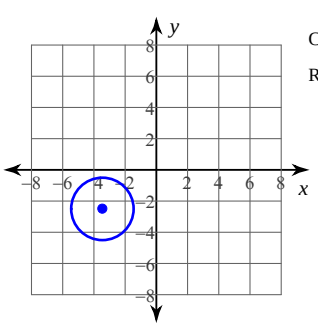
Center: $\left(-2\sqrt{3}, \frac{9}{2}\right)$
Radius: 2

C)



Center: $\left(2\sqrt{3}, -\frac{5}{2}\right)$
Radius: 2

D)



Center: $\left(-2\sqrt{3}, -\frac{5}{2}\right)$
Radius: 2

Answers to Assignment (ID: 8)

1) D
2) C
3) B
4) C
5) D
6) A
7) B
8) D
9) C
10) B
11) B
12) B
13) C
14) C
15) B
16) B
17) C
18) B
19) A
20) B
21) C
22) C
23) D
24) C

Geometry Name_____

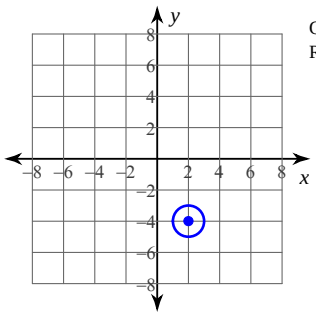
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

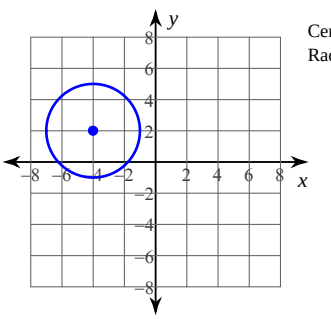
1) $(x-4)^2 + y^2 = 1$

A)



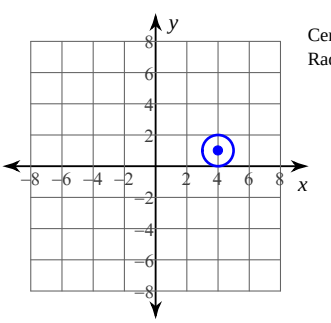
Center: (2, –4)
Radius: 1

B)



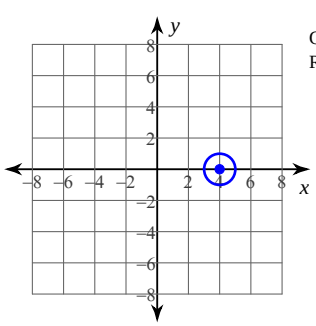
Center: (–4, 2)
Radius: 3

C)



Center: (4, 1)
Radius: 1

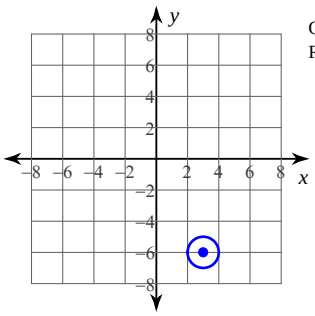
D)



Center: (4, 0)
Radius: 1

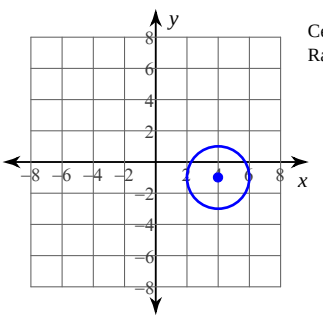
2) $(x+4)^2 + (y+1)^2 = 4$

A)



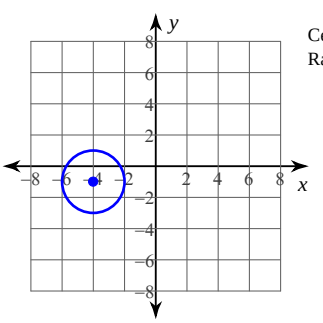
Center: (3, –6)
Radius: 1

B)



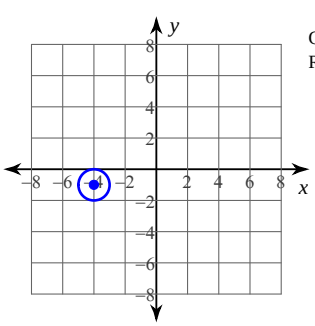
Center: (4, –1)
Radius: 2

C)



Center: (–4, –1)
Radius: 2

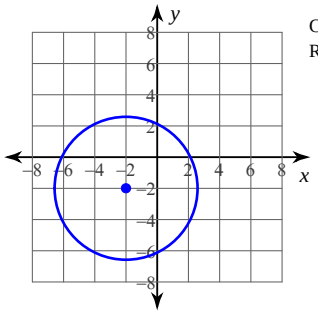
D)



Center: (–4, –1)
Radius: 1

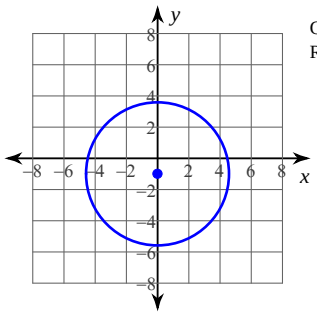
3) $(x+2)^2+(y+2)^2=21$

A)



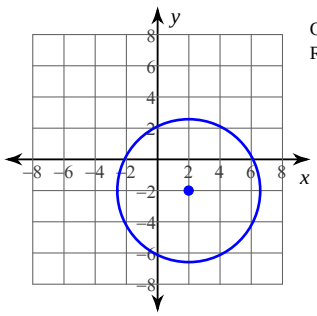
Center: $(-2,-2)$
Radius: $\sqrt{21}$

B)



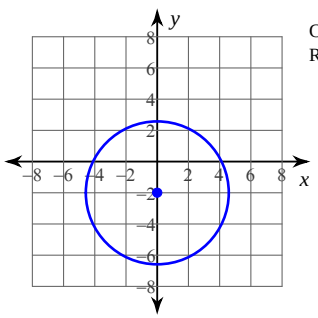
Center: $(0,-1)$
Radius: $\sqrt{21}$

C)



Center: $(2,-2)$
Radius: $\sqrt{21}$

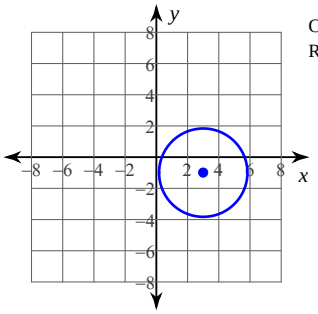
D)



Center: $(0,-2)$
Radius: $\sqrt{21}$

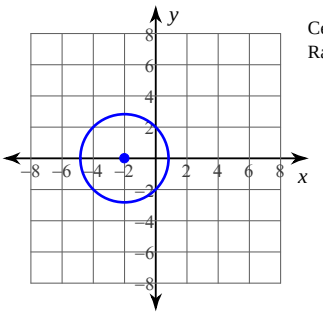
4) $(x-2)^2+y^2=8$

A)



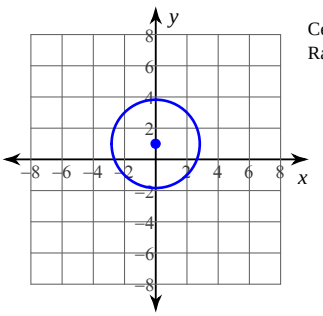
Center: $(3,-1)$
Radius: $2\sqrt{2}$

B)



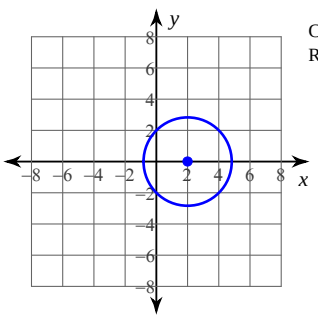
Center: $(-2,0)$
Radius: $2\sqrt{2}$

C)



Center: $(0,1)$
Radius: $2\sqrt{2}$

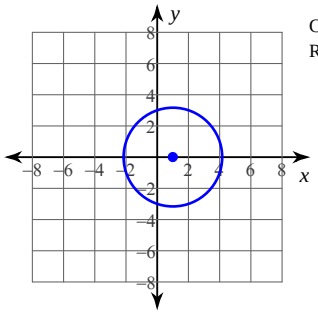
D)



Center: $(2,0)$
Radius: $2\sqrt{2}$

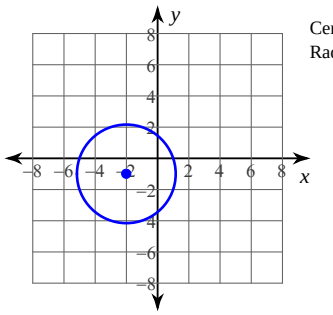
5) $(x+1)^2+(y-2)^2=10$

A)



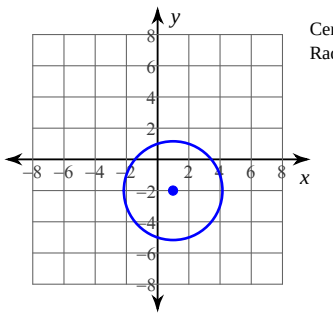
Center: $(1, 0)$
Radius: $\sqrt{10}$

B)



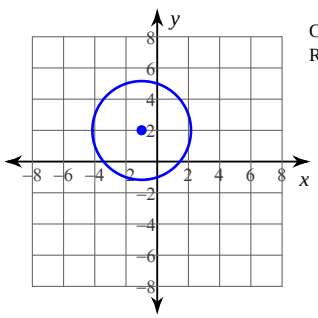
Center: $(-2, -1)$
Radius: $\sqrt{10}$

C)



Center: $(1, -2)$
Radius: $\sqrt{10}$

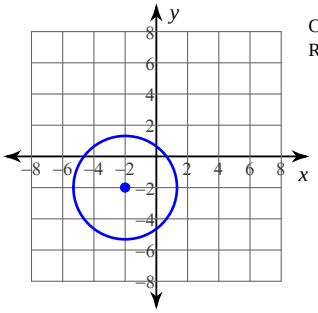
D)



Center: $(-1, 2)$
Radius: $\sqrt{10}$

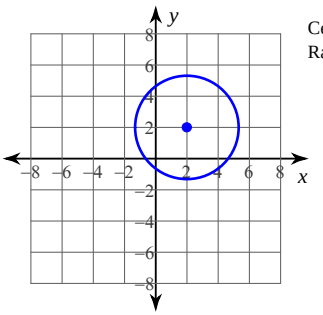
6) $y^2-3=4y-x^2-4x$

A)



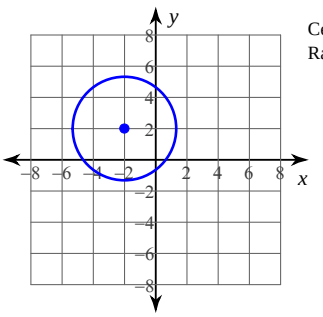
Center: $(-2, -2)$
Radius: $\sqrt{11}$

B)



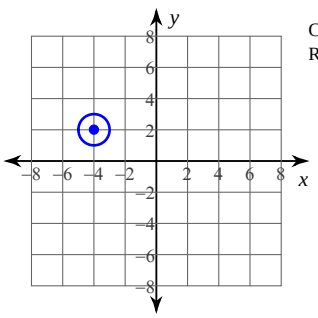
Center: $(2, 2)$
Radius: $\sqrt{11}$

C)



Center: $(-2, 2)$
Radius: $\sqrt{11}$

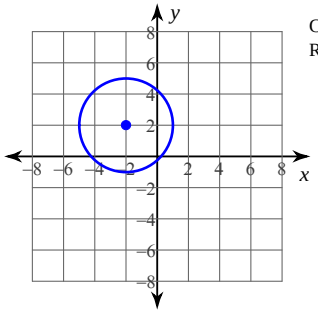
D)



Center: $(-4, 2)$
Radius: 1

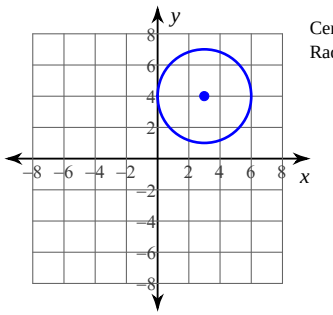
7) $y^2 - 6x = 8y - 16 - x^2$

A)



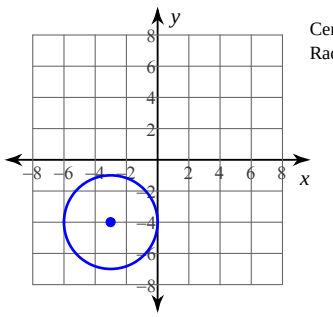
Center: (–2, 2)
Radius: 3

B)



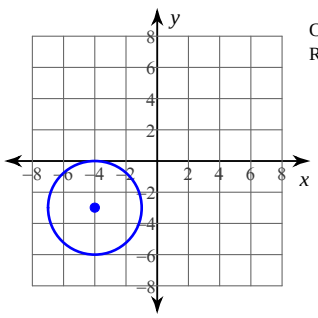
Center: (3, 4)
Radius: 3

C)



Center: (–3, –4)
Radius: 3

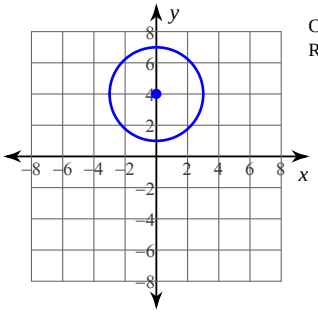
D)



Center: (–4, –3)
Radius: 3

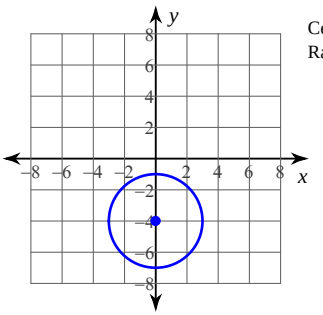
8) $x^2 + 8y + y^2 = -7$

A)



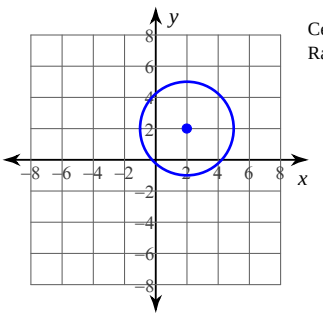
Center: (0, 4)
Radius: 3

B)



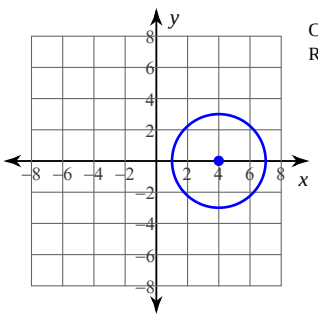
Center: (0, –4)
Radius: 3

C)



Center: (2, 2)
Radius: 3

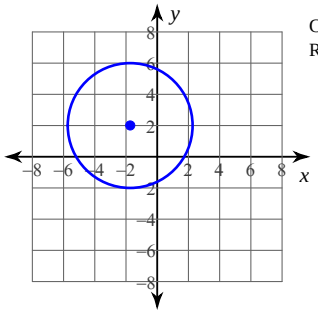
D)



Center: (4, 0)
Radius: 3

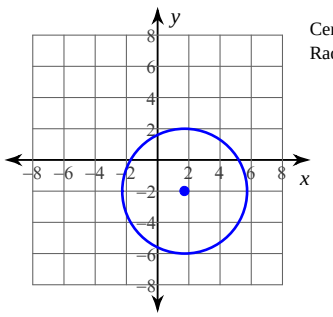
9) $y^2 - 2x\sqrt{3} + 4y - 9 = -x^2$

A)



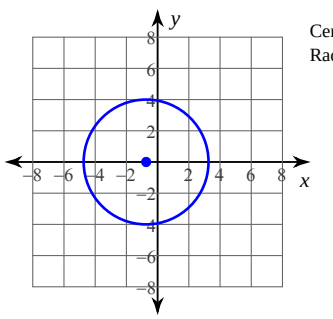
Center: $(-\sqrt{3}, 2)$
Radius: 4

B)



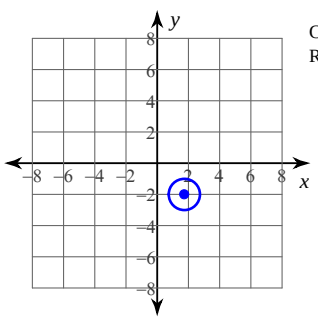
Center: $(\sqrt{3}, -2)$
Radius: 4

C)



Center: $(-\sqrt{3} + 1, 0)$
Radius: 4

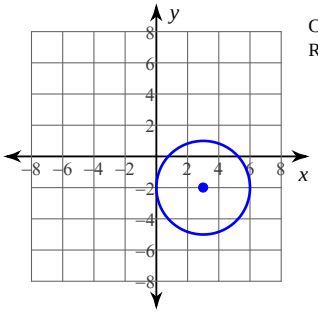
D)



Center: $(\sqrt{3}, -2)$
Radius: 1

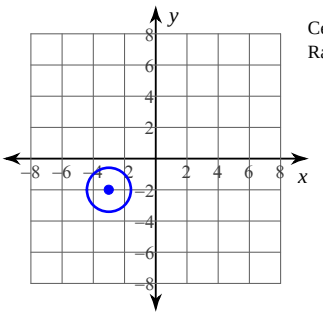
10) $x^2 + 4y + 6x = -y^2 - 11$

A)



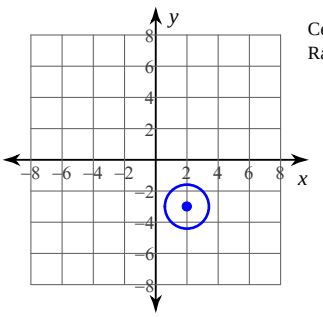
Center: $(3, -2)$
Radius: 3

B)



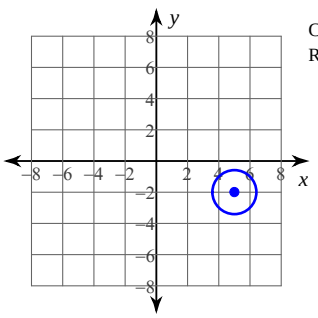
Center: $(-3, -2)$
Radius: $\sqrt{2}$

C)



Center: $(2, -3)$
Radius: $\sqrt{2}$

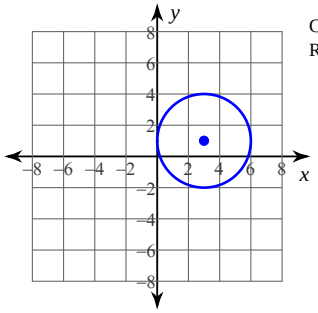
D)



Center: $(5, -2)$
Radius: $\sqrt{2}$

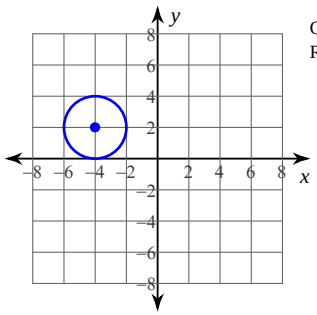
11) $0 = -2x - y^2 - 6y - x^2 - 9$

A)



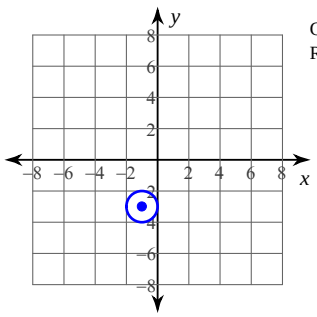
Center: (3, 1)
Radius: 3

B)



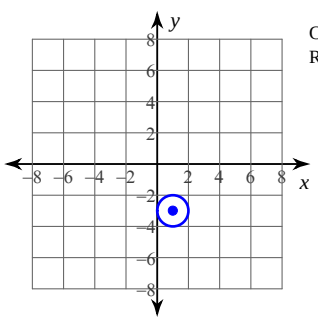
Center: (−4, 2)
Radius: 2

C)



Center: (−1, −3)
Radius: 1

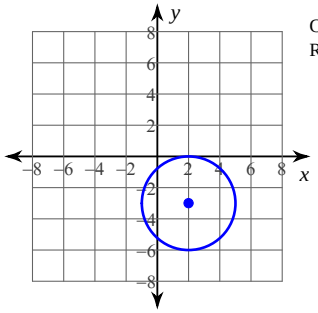
D)



Center: (1, −3)
Radius: 1

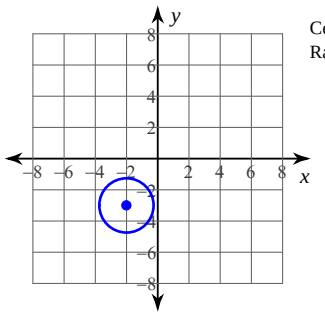
12) $4x = -6y - y^2 - 10 - x^2$

A)



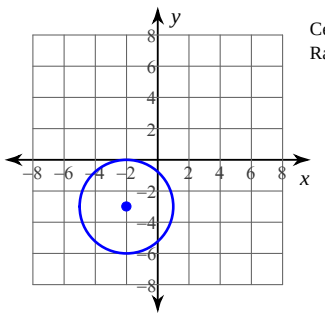
Center: (2, −3)
Radius: 3

B)



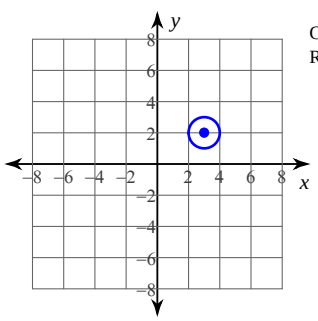
Center: $(-\sqrt{2}, -3)$
Radius: $\sqrt{3}$

C)



Center: (−2, −3)
Radius: 3

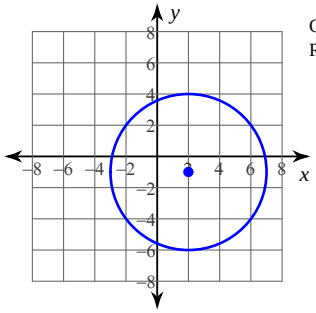
D)



Center: (3, 2)
Radius: 1

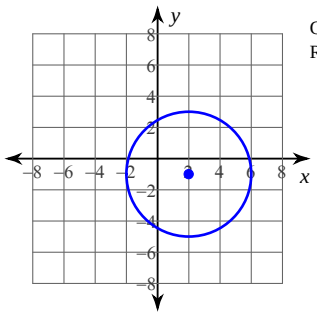
13) $2y + x^2 = 20 + 4x - y^2$

A)



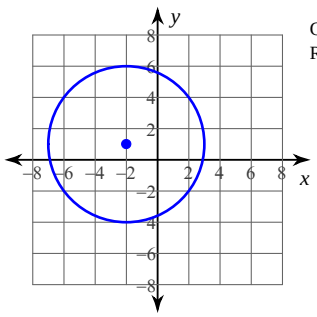
Center: $(2, -1)$
Radius: 5

B)



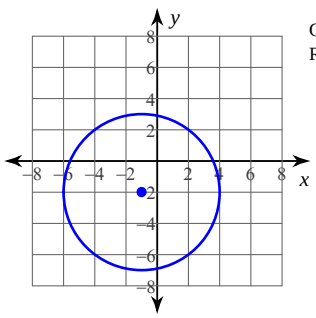
Center: $(2, -1)$
Radius: 4

C)



Center: $(-2, 1)$
Radius: 5

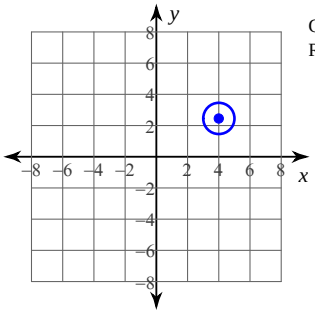
D)



Center: $(-1, -2)$
Radius: 5

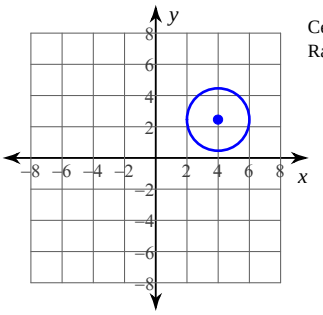
14) $-8x - 2y\sqrt{6} + 21 = -x^2 - y^2$

A)



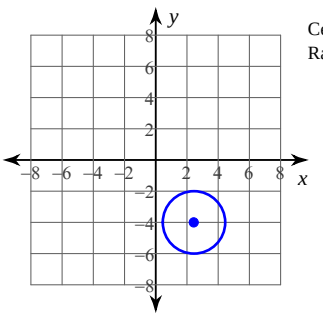
Center: $(4, \sqrt{6})$
Radius: 1

B)



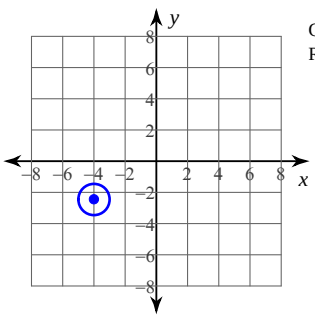
Center: $(4, \sqrt{6})$
Radius: 2

C)



Center: $(\sqrt{6}, -4)$
Radius: 2

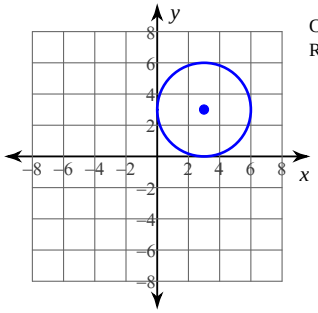
D)



Center: $(-4, -\sqrt{6})$
Radius: 1

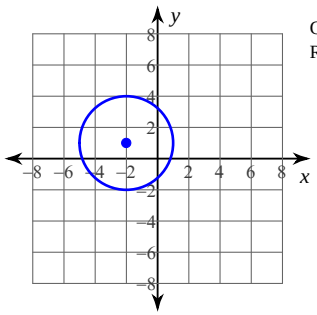
15) $y^2 - 2y + 4x = -x^2 + 4$

A)



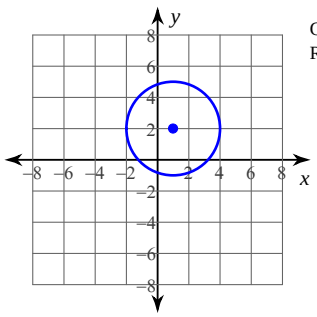
Center: (3, 3)
Radius: 3

B)



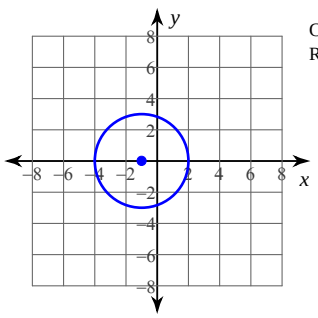
Center: (−2, 1)
Radius: 3

C)



Center: (1, 2)
Radius: 3

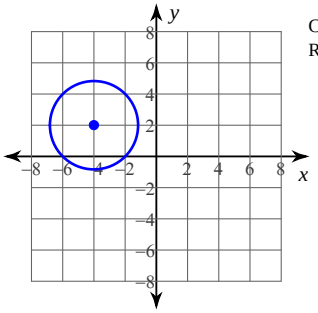
D)



Center: (−1, 0)
Radius: 3

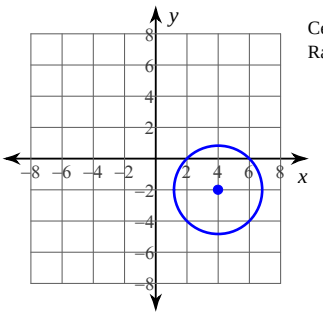
16) $y^2 - 4y + x^2 = -12 - 8x$

A)



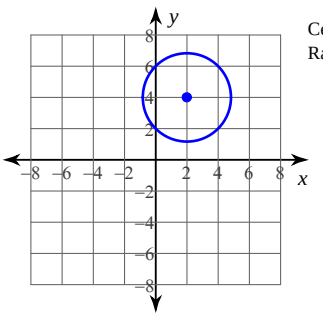
Center: (−4, 2)
Radius: $2\sqrt{2}$

B)



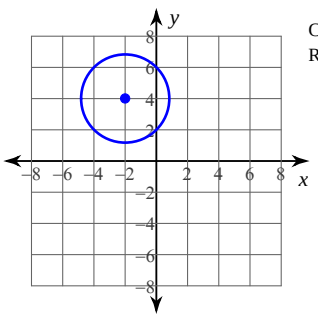
Center: (4, −2)
Radius: $2\sqrt{2}$

C)



Center: (2, 4)
Radius: $2\sqrt{2}$

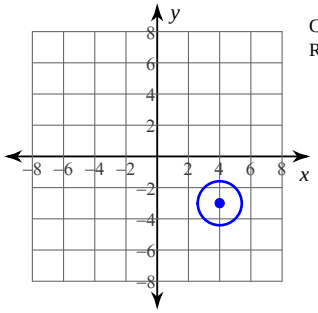
D)



Center: (−2, 4)
Radius: $2\sqrt{2}$

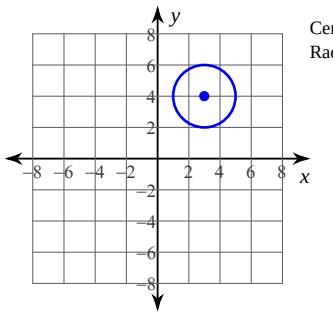
17) $y^2 + 23 + x^2 = 8y + 6x$

A)



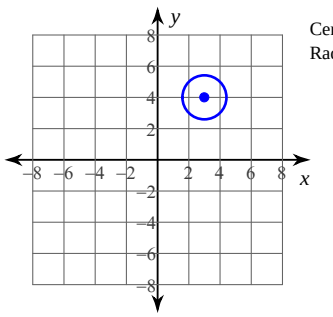
Center: $(4, -3)$
Radius: $\sqrt{2}$

B)



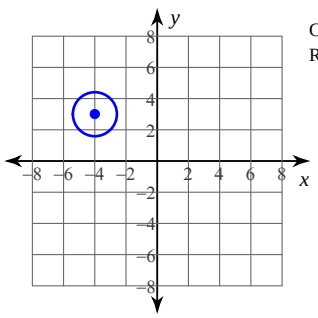
Center: $(3, 4)$
Radius: 2

C)



Center: $(3, 4)$
Radius: $\sqrt{2}$

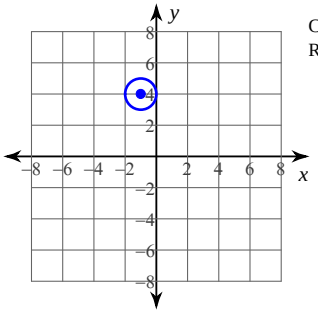
D)



Center: $(-4, 3)$
Radius: $\sqrt{2}$

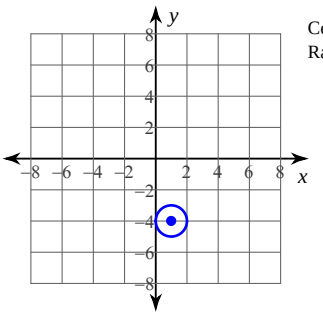
18) $16 + x^2 + y^2 = 2x + 8y$

A)



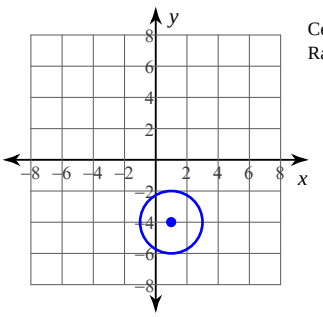
Center: $(-1, 4)$
Radius: 1

B)



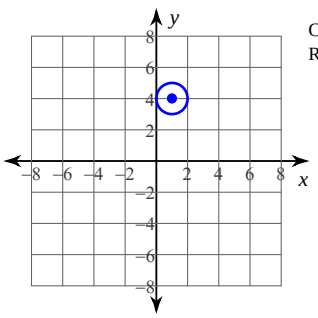
Center: $(1, -4)$
Radius: 1

C)



Center: $(1, -4)$
Radius: 2

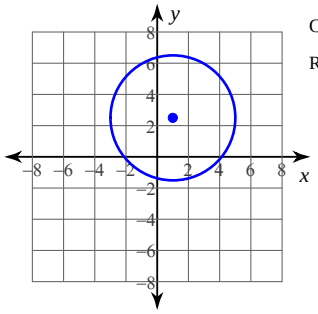
D)



Center: $(1, 4)$
Radius: 1

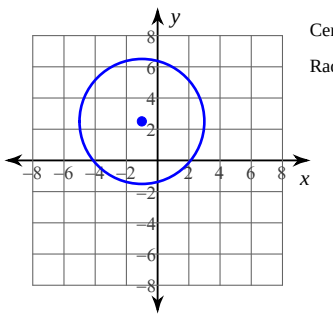
19) $4y^2 = -8x + 20y + 35 - 4x^2$

A)



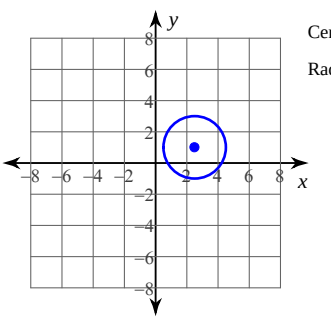
Center: $\left(1, \frac{5}{2}\right)$
Radius: 4

B)



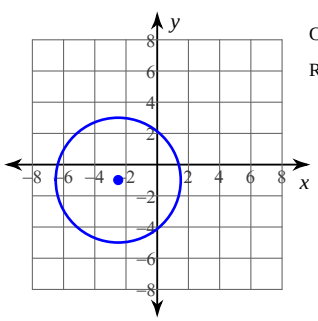
Center: $\left(-1, \frac{5}{2}\right)$
Radius: 4

C)



Center: $\left(\frac{5}{2}, 1\right)$
Radius: 2

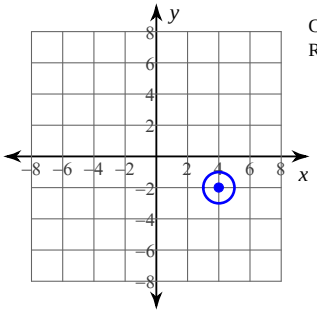
D)



Center: $\left(-\frac{5}{2}, -1\right)$
Radius: 4

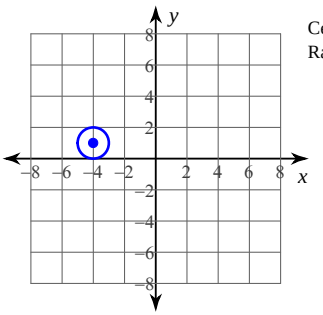
20) $y^2 + 4y = 8x - 19 - x^2$

A)



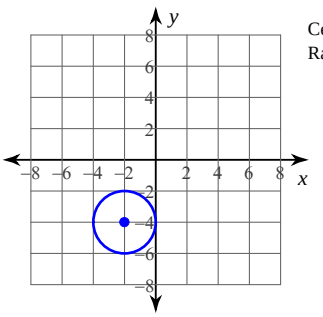
Center: (4, –2)
Radius: 1

B)



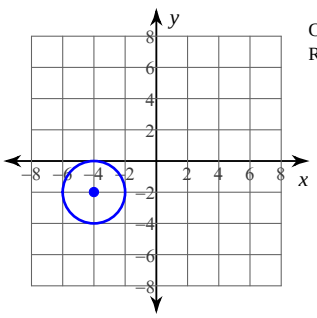
Center: (–4, 1)
Radius: 1

C)



Center: (–2, –4)
Radius: 2

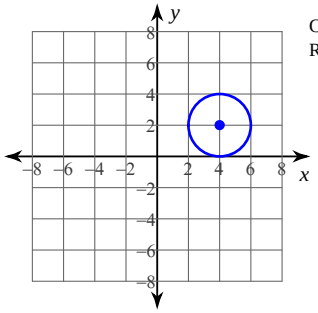
D)



Center: (–4, –2)
Radius: 2

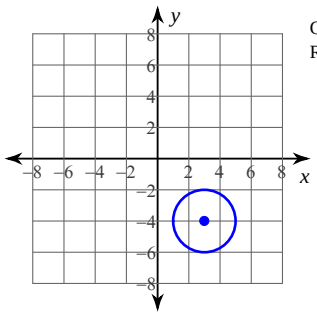
21) $21 + y^2 = -6x - x^2 - 8y$

A)



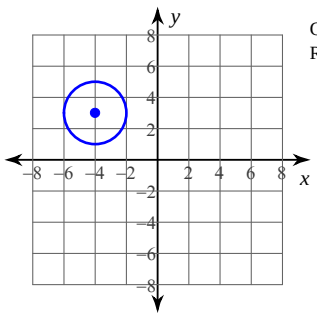
Center: (4, 2)
Radius: 2

B)



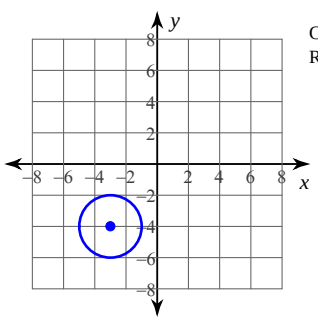
Center: (3, –4)
Radius: 2

C)



Center: (–4, 3)
Radius: 2

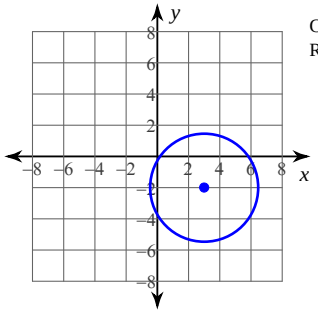
D)



Center: (–3, –4)
Radius: 2

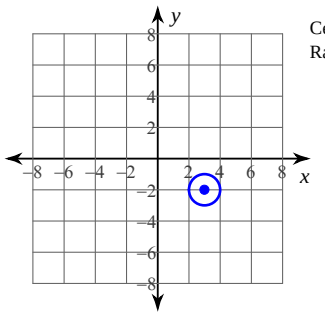
22) $-6x + x^2 = -4y - 1 - y^2$

A)



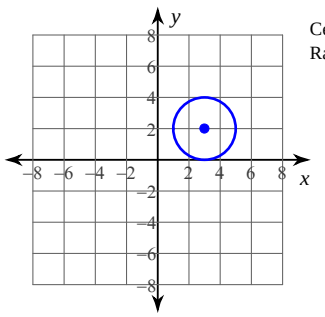
Center: (3, –2)
Radius: $2\sqrt{3}$

B)



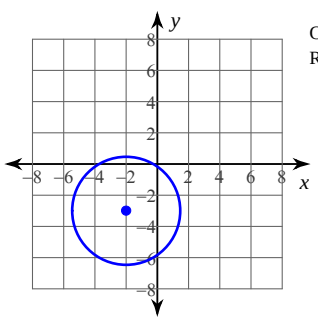
Center: (3, –2)
Radius: 1

C)



Center: (3, 2)
Radius: 2

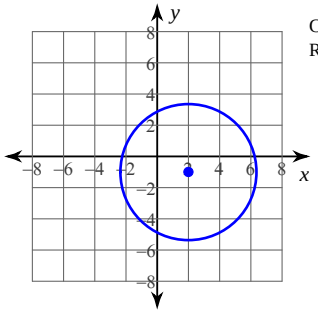
D)



Center: (–2, –3)
Radius: $2\sqrt{3}$

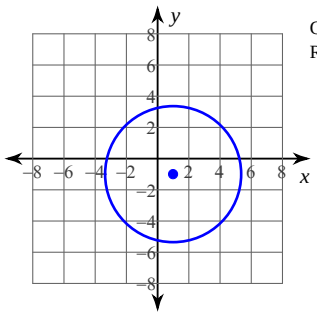
23) $x^2 - 2x = -2y - y^2 + 17$

A)



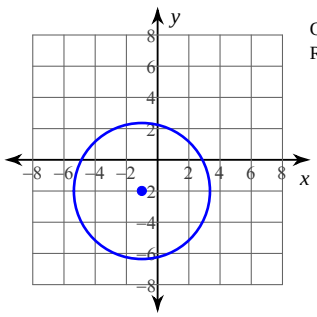
Center: $(2, -1)$
Radius: $\sqrt{19}$

B)



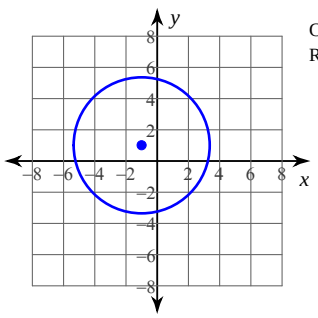
Center: $(1, -1)$
Radius: $\sqrt{19}$

C)



Center: $(-1, -2)$
Radius: $\sqrt{19}$

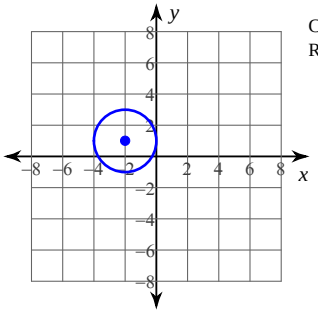
D)



Center: $(-1, 1)$
Radius: $\sqrt{19}$

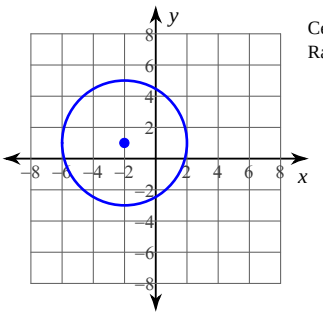
24) $1 + 4x = -y^2 + 2y - x^2$

A)



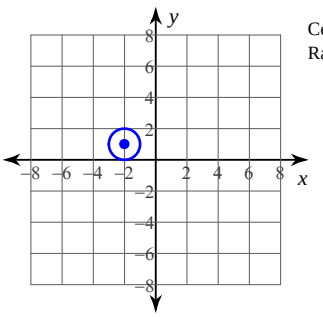
Center: $(-2, 1)$
Radius: 2

B)



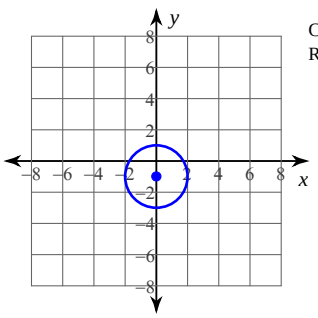
Center: $(-2, 1)$
Radius: 4

C)



Center: $(-2, 1)$
Radius: 1

D)



Center: $(0, -1)$
Radius: 2

Answers to Assignment (ID: 9)

1) D
2) C
3) A
4) D
5) D
6) C
7) B
8) B
9) B
10) B
11) C
12) B
13) A
14) A
15) B
16) A
17) C
18) D
19) B
20) A
21) D
22) A
23) B
24) A

Geometry Name_____

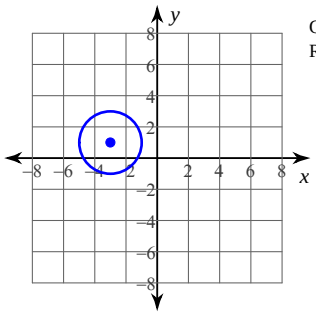
Assignment

Date_____ Period____

Identify the center and radius of each. Then sketch the graph.

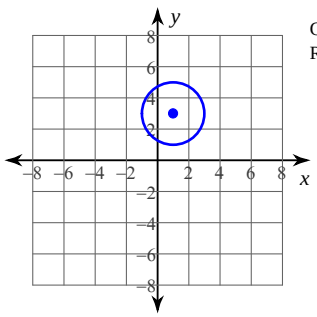
1) $x^2 + y^2 = -6 + 2y - 6x$

A)



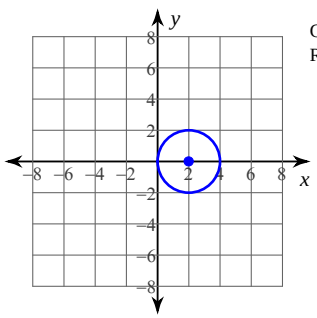
Center: (–3, 1)
Radius: 2

B)



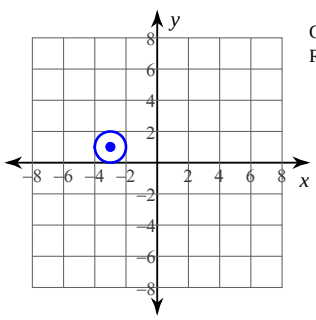
Center: (1, 3)
Radius: 2

C)



Center: (2, 0)
Radius: 2

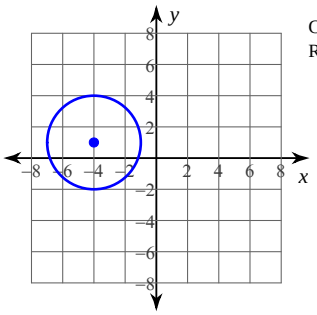
D)



Center: (–3, 1)
Radius: 1

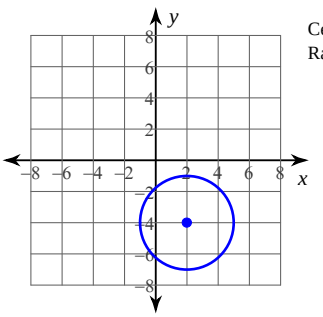
2) $-8x + x^2 = -y^2 - 11 + 4y$

A)



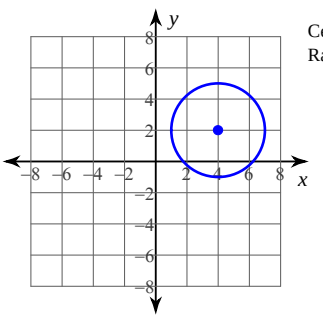
Center: (–4, 1)
Radius: 3

B)



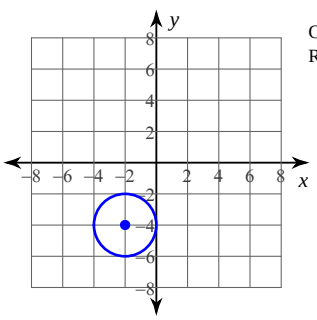
Center: (2, –4)
Radius: 3

C)



Center: (4, 2)
Radius: 3

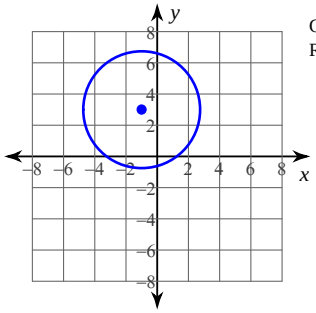
D)



Center: (–2, –4)
Radius: 2

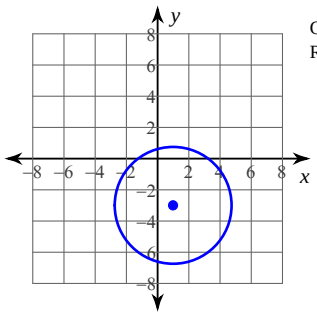
3) $y^2 - 2x - 4 + x^2 = 6y$

A)



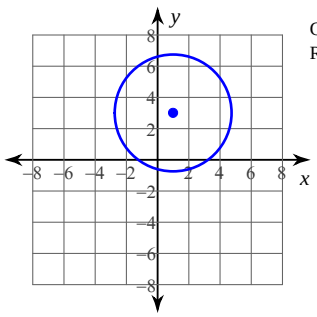
Center: $(-1, 3)$
Radius: $\sqrt{14}$

B)



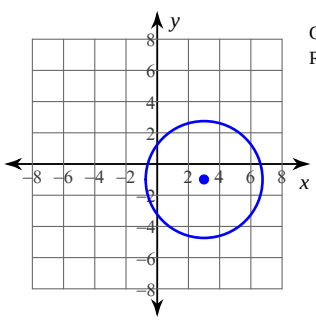
Center: $(1, -3)$
Radius: $\sqrt{14}$

C)



Center: $(1, 3)$
Radius: $\sqrt{14}$

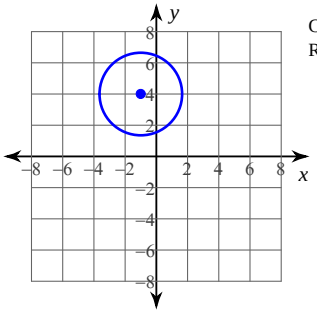
D)



Center: $(3, -1)$
Radius: $\sqrt{14}$

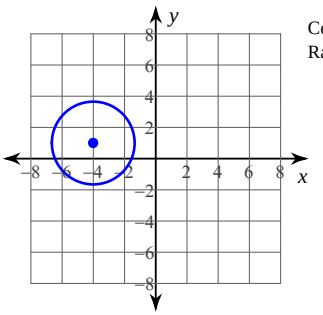
4) $2x + 10 + x^2 = 8y - y^2$

A)



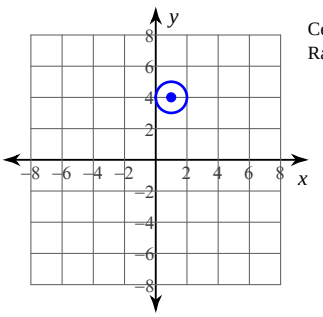
Center: $(-1, 4)$
Radius: $\sqrt{7}$

B)



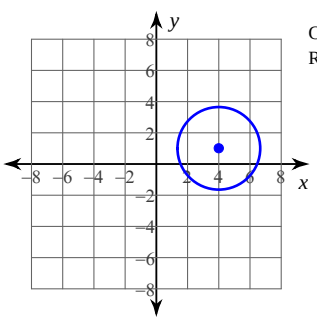
Center: $(-4, 1)$
Radius: $\sqrt{7}$

C)



Center: $(1, 4)$
Radius: 1

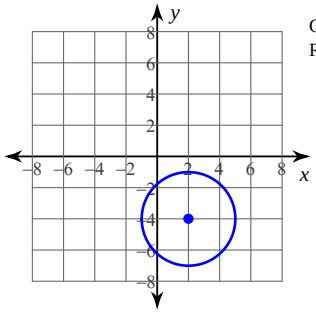
D)



Center: $(4, 1)$
Radius: $\sqrt{7}$

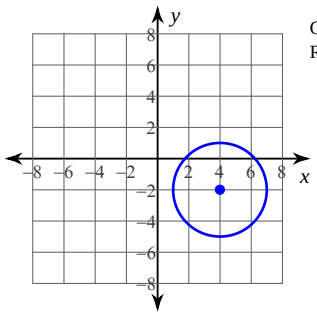
5) $y^2 + x^2 = -8y - 11 - 4x$

A)



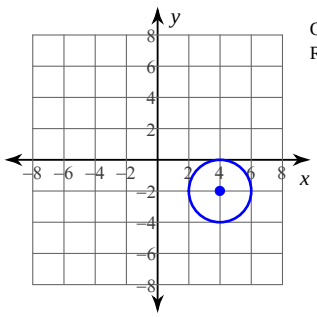
Center: (2, –4)
Radius: 3

B)



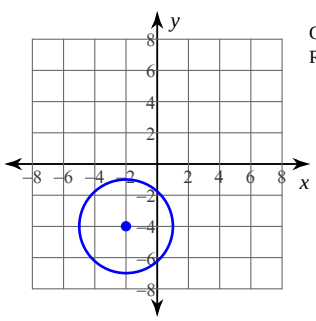
Center: (4, –2)
Radius: 3

C)



Center: (4, –2)
Radius: 2

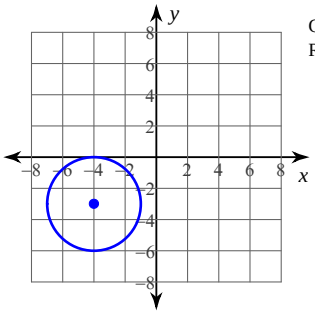
D)



Center: (–2, –4)
Radius: 3

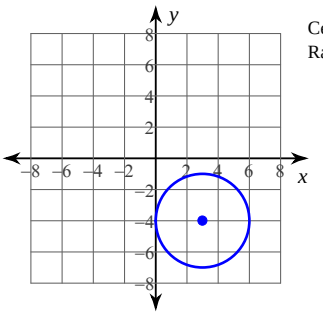
6) $(x + 4)^2 + (y + 3)^2 = 9$

A)



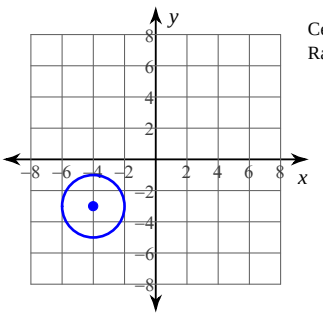
Center: (–4, –3)
Radius: 3

B)



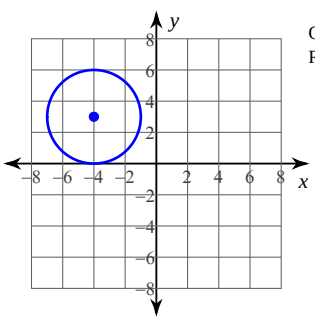
Center: (3, –4)
Radius: 3

C)



Center: (–4, –3)
Radius: 2

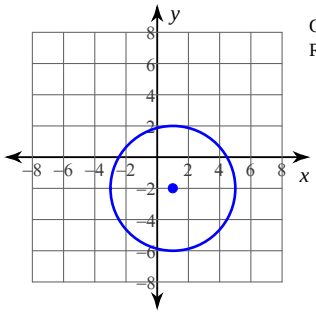
D)



Center: (–4, 3)
Radius: 3

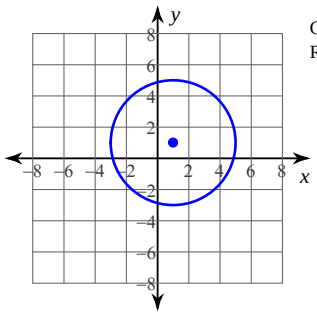
7) $(x-1)^2+(y+2)^2=16$

A)



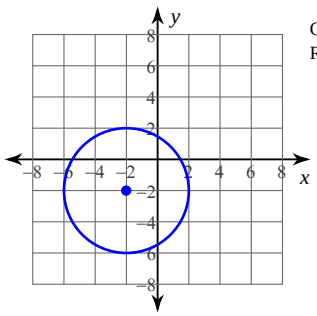
Center: (1, –2)
Radius: 4

B)



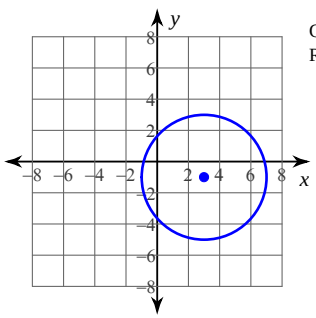
Center: (1, 1)
Radius: 4

C)



Center: (–2, –2)
Radius: 4

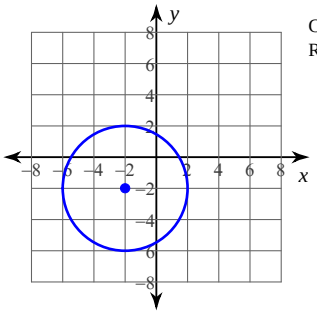
D)



Center: (3, –1)
Radius: 4

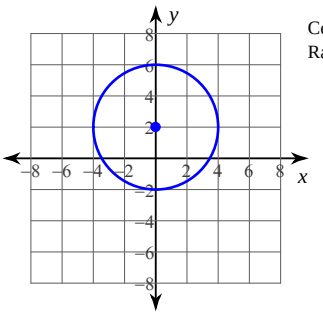
8) $(x-2)^2+(y+2)^2=16$

A)



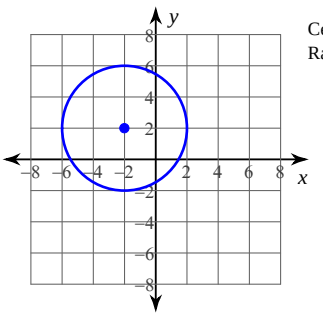
Center: (–2, –2)
Radius: 4

B)



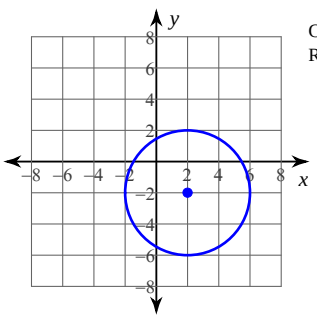
Center: (0, 2)
Radius: 4

C)



Center: (–2, 2)
Radius: 4

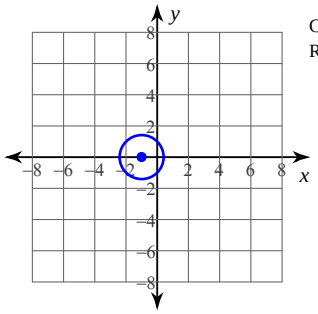
D)



Center: (2, –2)
Radius: 4

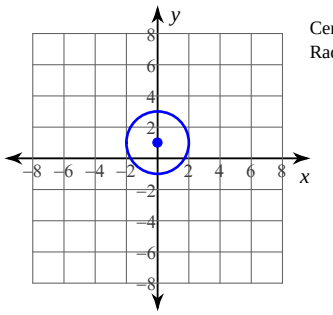
9) $(x+1)^2 + y^2 = 2$

A)



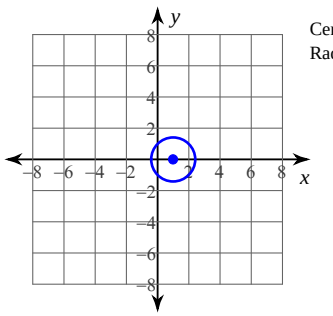
Center: $(-1, 0)$
Radius: $\sqrt{2}$

B)



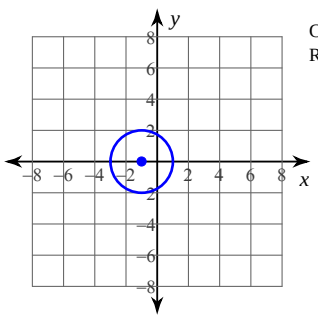
Center: $(0, 1)$
Radius: 2

C)



Center: $(1, 0)$
Radius: $\sqrt{2}$

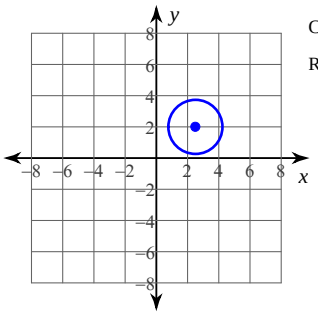
D)



Center: $(-1, 0)$
Radius: 2

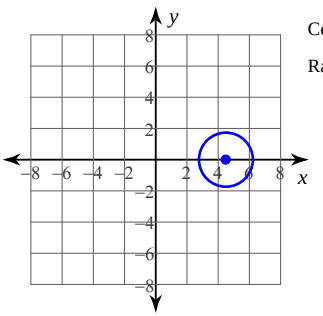
10) $\left(x - \frac{5}{2}\right)^2 + (y-2)^2 = 3$

A)



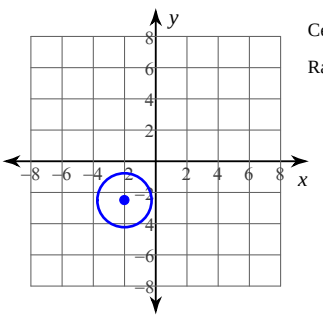
Center: $\left(\frac{5}{2}, 2\right)$
Radius: $\sqrt{3}$

B)



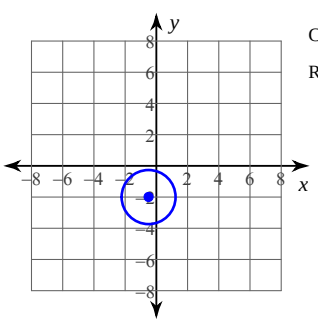
Center: $\left(\frac{9}{2}, 0\right)$
Radius: $\sqrt{3}$

C)



Center: $\left(-2, -\frac{5}{2}\right)$
Radius: $\sqrt{3}$

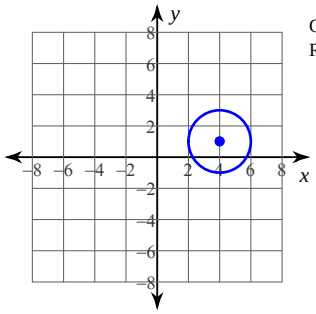
D)



Center: $\left(-\frac{1}{2}, -2\right)$
Radius: $\sqrt{3}$

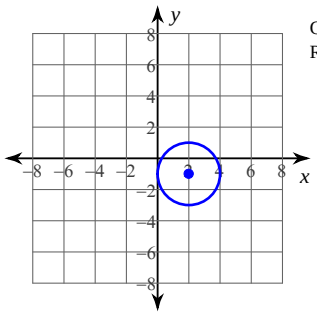
11) $(x-4)^2+(y-1)^2=4$

A)



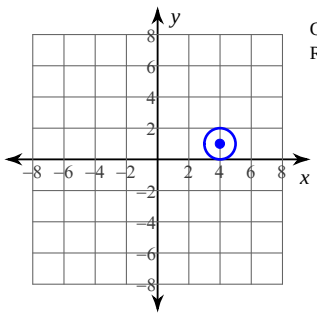
Center: (4, 1)
Radius: 2

B)



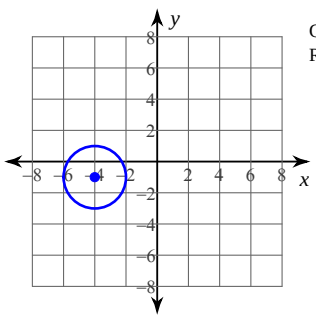
Center: (2, –1)
Radius: 2

C)



Center: (4, 1)
Radius: 1

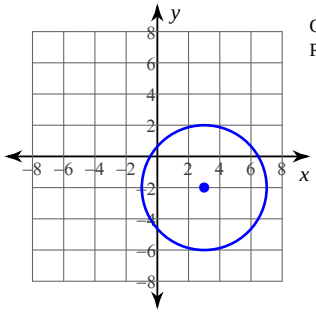
D)



Center: (–4, –1)
Radius: 2

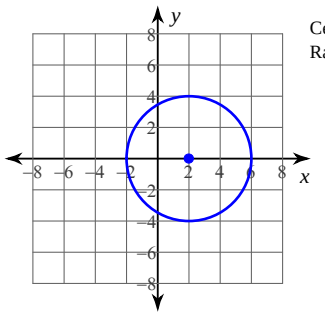
12) $-6y-4x-3=-x^2-y^2$

A)



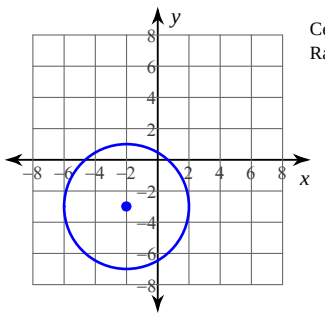
Center: (3, –2)
Radius: 4

B)



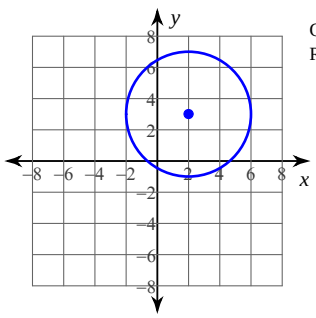
Center: (2, 0)
Radius: 4

C)



Center: (–2, –3)
Radius: 4

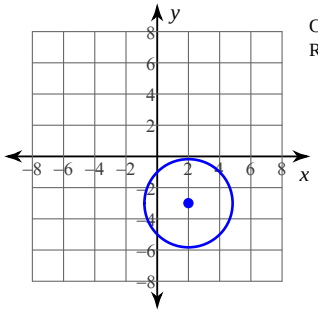
D)



Center: (2, 3)
Radius: 4

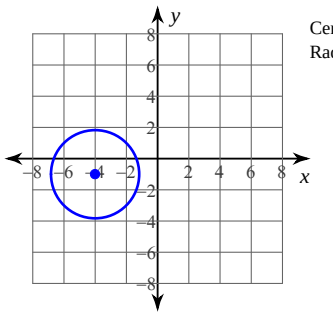
13) $y^2 + 9 = -x^2 - 2x + 8y$

A)



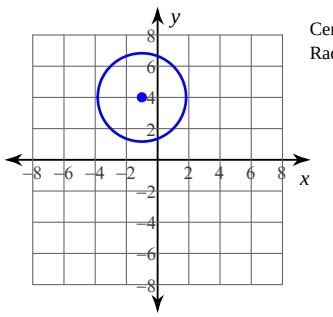
Center: $(2, -3)$
Radius: $2\sqrt{2}$

B)



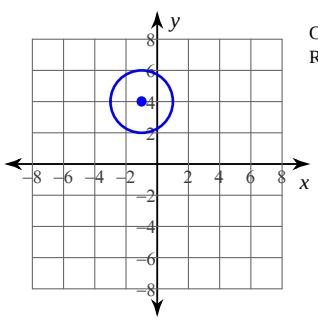
Center: $(-4, -1)$
Radius: $2\sqrt{2}$

C)



Center: $(-1, 4)$
Radius: $2\sqrt{2}$

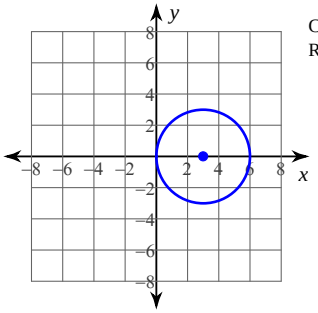
D)



Center: $(-1, 4)$
Radius: 2

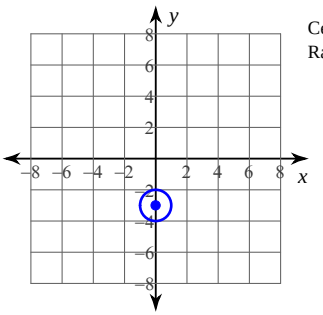
14) $-6y + 8 = -x^2 - y^2$

A)



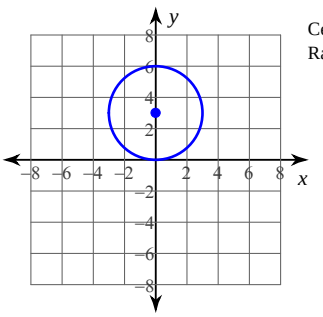
Center: $(3, 0)$
Radius: 3

B)



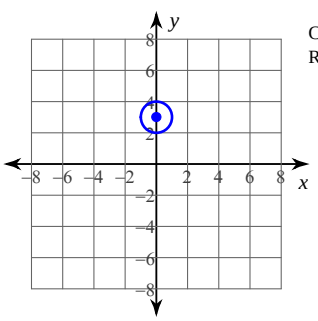
Center: $(0, -3)$
Radius: 1

C)



Center: $(0, 3)$
Radius: 3

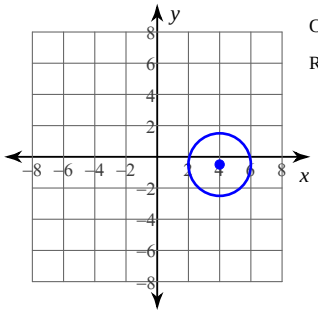
D)



Center: $(0, 3)$
Radius: 1

15) $4y^2 + 4x^2 + 4y = 32x - 57$

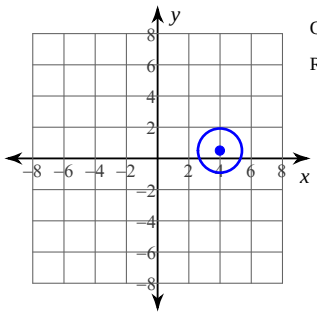
A)



Center: $\left(4, -\frac{1}{2}\right)$

Radius: 2

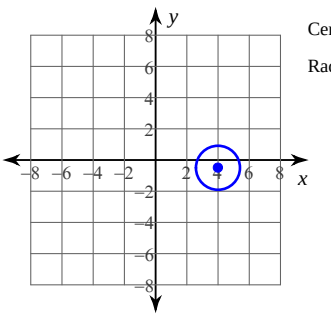
B)



Center: $\left(4, \frac{1}{2}\right)$

Radius: $\sqrt{2}$

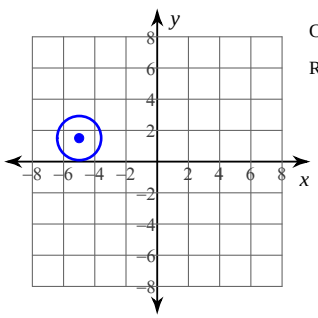
C)



Center: $\left(4, -\frac{1}{2}\right)$

Radius: $\sqrt{2}$

D)

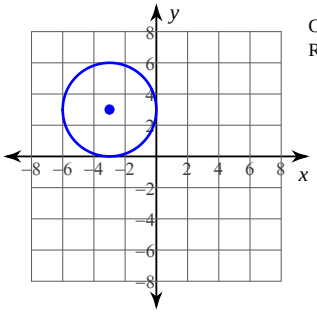


Center: $\left(-5, \frac{3}{2}\right)$

Radius: $\sqrt{2}$

16) $y^2 + 6y = -9 - x^2 + 6x$

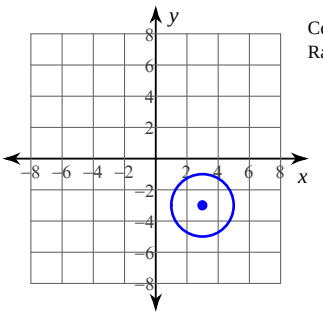
A)



Center: $(-3, 3)$

Radius: 3

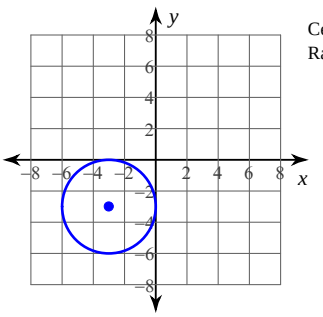
B)



Center: $(3, -3)$

Radius: 2

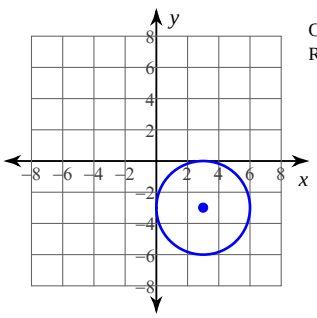
C)



Center: $(-3, -3)$

Radius: 3

D)

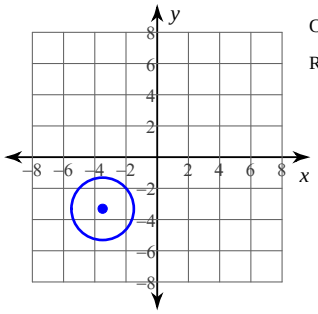


Center: $(3, -3)$

Radius: 3

17) $-28x + 4x^2 - 8y\sqrt{11} = -4y^2 - 57$

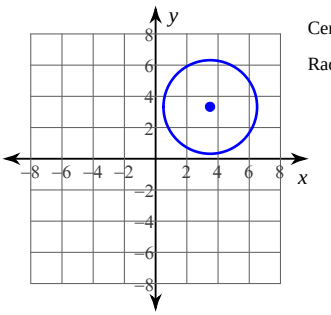
A)



Center: $\left(-\frac{7}{2}, -\sqrt{11}\right)$

Radius: 2

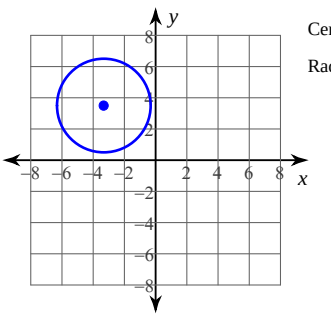
B)



Center: $\left(\frac{7}{2}, \sqrt{11}\right)$

Radius: 3

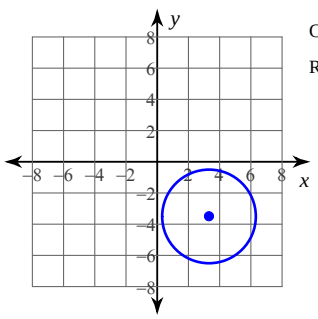
C)



Center: $\left(-\sqrt{11}, \frac{7}{2}\right)$

Radius: 3

D)

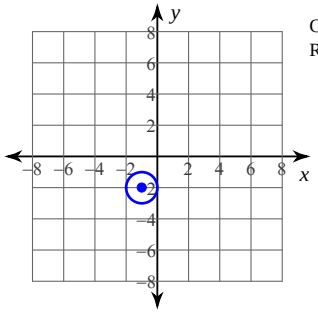


Center: $\left(\sqrt{11}, -\frac{7}{2}\right)$

Radius: 3

18) $2x + 4 + 4y = -y^2 - x^2$

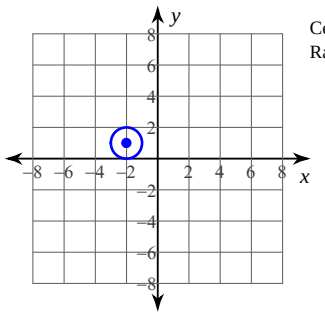
A)



Center: $(-1, -2)$

Radius: 1

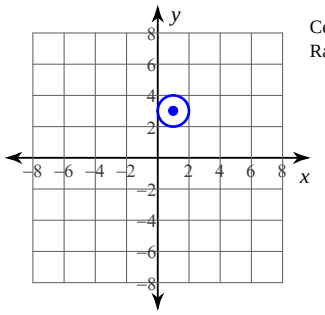
B)



Center: $(-2, 1)$

Radius: 1

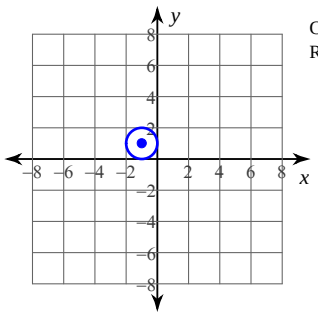
C)



Center: $(1, 3)$

Radius: 1

D)

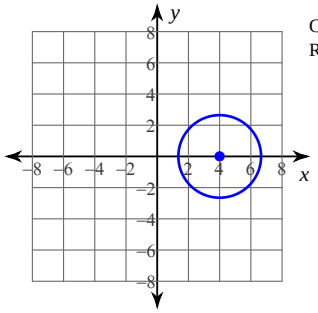


Center: $(-1, 1)$

Radius: 1

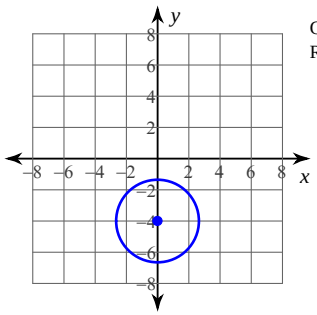
19) $9 - 8x + y^2 = -x^2$

A)



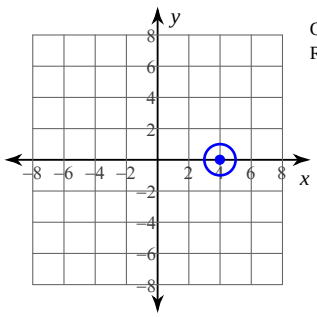
Center: $(4, 0)$
Radius: $\sqrt{7}$

B)



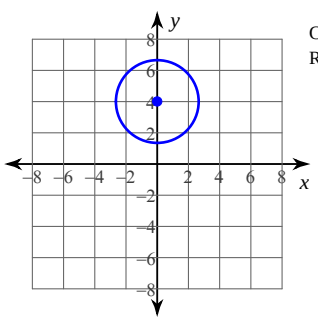
Center: $(0, -4)$
Radius: $\sqrt{7}$

C)



Center: $(4, 0)$
Radius: 1

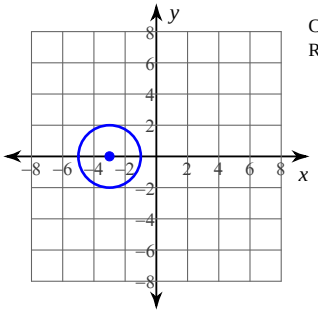
D)



Center: $(0, 4)$
Radius: $\sqrt{7}$

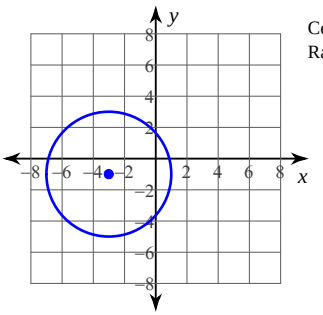
20) $x^2 + 6x + y^2 = -5$

A)



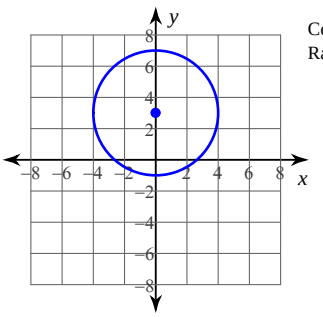
Center: $(-3, 0)$
Radius: 2

B)



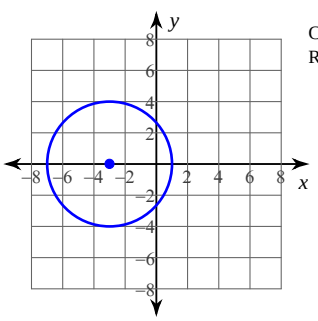
Center: $(-3, -1)$
Radius: 4

C)



Center: $(0, 3)$
Radius: 4

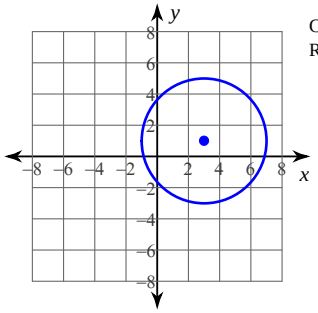
D)



Center: $(-3, 0)$
Radius: 4

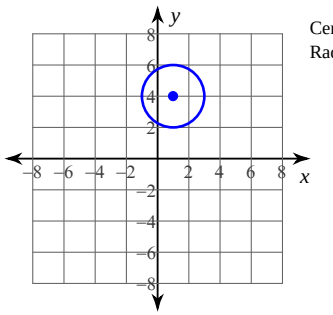
21) $6 + y^2 = -x^2 + 2y + 6x$

A)



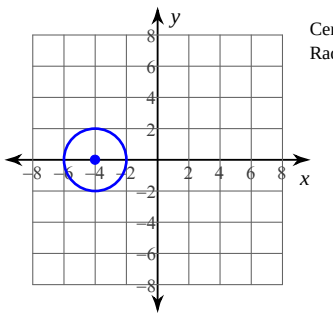
Center: $(3, 1)$
Radius: 4

B)



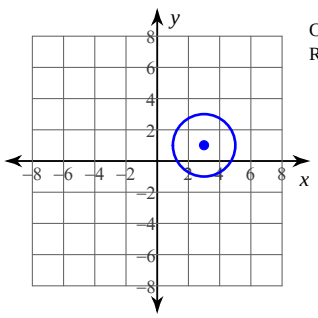
Center: $(1, 4)$
Radius: 2

C)



Center: $(-4, 0)$
Radius: 2

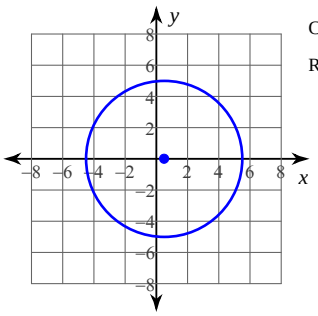
D)



Center: $(3, 1)$
Radius: 2

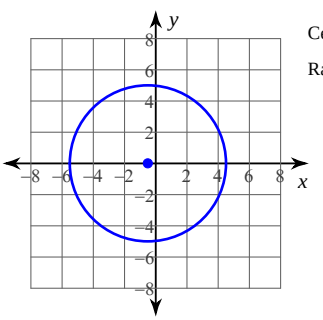
22) $-99 + 4y^2 = 4x - 4x^2$

A)



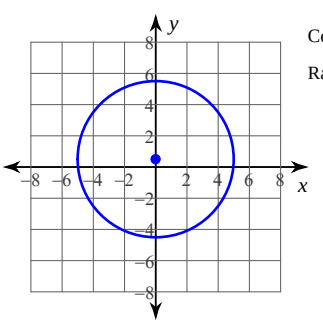
Center: $\left(\frac{1}{2}, 0\right)$
Radius: 5

B)



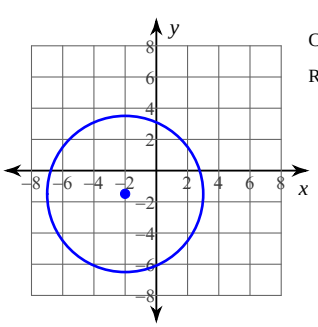
Center: $\left(-\frac{1}{2}, 0\right)$
Radius: 5

C)



Center: $\left(0, \frac{1}{2}\right)$
Radius: 5

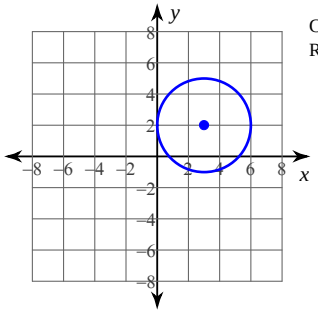
D)



Center: $\left(-2, -\frac{3}{2}\right)$
Radius: 5

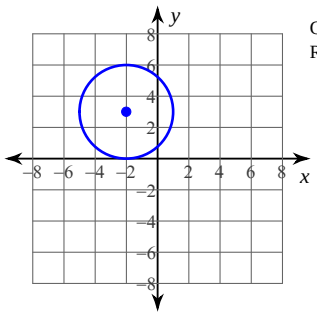
23) $-6y = -4x - 4 - x^2 - y^2$

A)



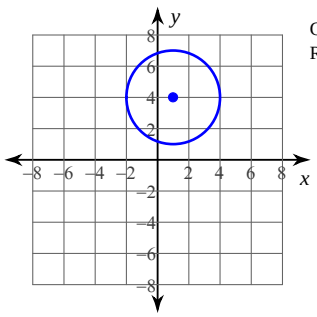
Center: (3, 2)
Radius: 3

B)



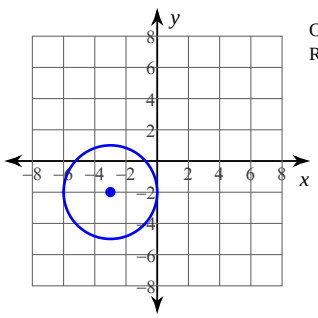
Center: (−2, 3)
Radius: 3

C)



Center: (1, 4)
Radius: 3

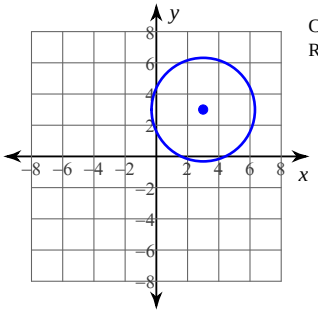
D)



Center: (−3, −2)
Radius: 3

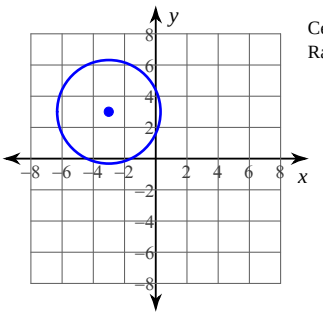
24) $7 + 6x = 6y - x^2 - y^2$

A)



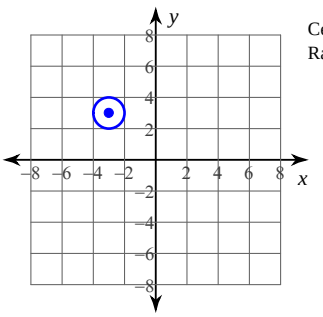
Center: (3, 3)
Radius: $\sqrt{11}$

B)



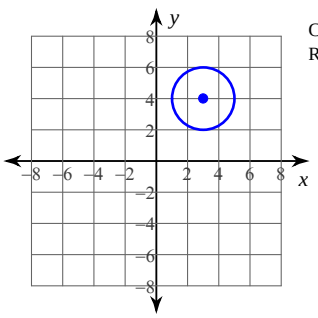
Center: (−3, 3)
Radius: $\sqrt{11}$

C)



Center: (−3, 3)
Radius: 1

D)



Center: (3, 4)
Radius: 2

Answers to Assignment (ID: 10)

1) A
2) C
3) C
4) A
5) D
6) A
7) A
8) D
9) A
10) A
11) A
12) D
13) C
14) D
15) C
16) D
17) B
18) A
19) A
20) A
21) D
22) A
23) B
24) B