

Assignment

Solve each system by graphing.

$$1) \frac{3}{7}y = x - \frac{27}{7}$$

$$-3y - 27 = -7x$$

$$2) \frac{11}{8}x = -y - 7$$

$$\frac{56}{3} = -x + \frac{8}{3}y$$

$$3) -4x + 3y - 15 = 0$$

$$-3y - 3 = 2x$$

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

$$36x + 3y = 21$$

$$5) 2x + 42 = -7y$$

$$1 = -y - x$$

$$6) 3y - 5x - 21 = 0$$

$$-54 = 9y + 24x$$

$$7) x = \frac{1}{3}y + \frac{8}{3}$$

$$14 = 2y + 9x$$

$$8) -1 = \frac{1}{8}y + \frac{13}{72}x$$

$$8 + \frac{13}{9}x = -y$$

$$9) 3x - 35 = -7y$$

$$13x = -35 - 7y$$

$$10) -2x - y = 7$$

$$1 - \frac{1}{6}y - \frac{1}{42}x = 0$$

$$11) -x - 6y - 42 = 0$$

$$6 + 7x = -6y$$

$$12) 0 = -14 - 2y + x$$

$$11x - 42 = -6y$$

$$13) y - x = 6$$

$$x + \frac{20}{7} = -\frac{4}{7}y$$

$$14) 144 = -18y - 26x$$

$$0 = 9 + x$$

$$15) 4y = -4 - 5x$$

$$0 = 4 + 4y + 5x$$

$$16) 3 = -y + x$$

$$-16 + 9x = -2y$$

$$17) 13x + 5y = 30$$

$$30 = 13x + 5y$$

$$18) -21x + 15y = 45$$

$$0 = -10y - 8x - 80$$

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

$$3y + 9x = 6$$

$$20) y = -1 - x$$

$$-y = -x - 7$$



$$\begin{aligned} 21) \quad x - 72 + 9y &= 0 \\ -4x &= 3y + 9 \end{aligned}$$

$$\begin{aligned} 22) \quad 8x + 5 &= y \\ -16x - 10 &= -2y \end{aligned}$$

$$\begin{aligned} 23) \quad -5x + 3y &= -27 \\ -3y + x &= -9 \end{aligned}$$

$$\begin{aligned} 24) \quad 0 &= x + 5y + 25 \\ -5y &= 13x - 35 \end{aligned}$$



Answers to Assignment (ID: 1)

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|----------------------------------|---------------|----------------------------------|---------------|
| 1) Infinite number of solutions | 2) $(-8, 4)$ | 3) $(-3, 1)$ | |
| 4) $(1, -5)$ | 5) $(7, -8)$ | 6) $(-3, 2)$ | 7) $(2, -2)$ |
| 8) Infinite number of solutions | 9) $(-7, 8)$ | 10) $(-7, 7)$ | |
| 11) $(6, -8)$ | 12) $(6, -4)$ | 13) $(-4, 2)$ | 14) $(-9, 5)$ |
| 15) Infinite number of solutions | 16) $(2, -1)$ | 17) Infinite number of solutions | |
| 18) $(-5, -4)$ | 19) $(1, -1)$ | 20) $(-4, 3)$ | 21) $(-9, 9)$ |
| 22) Infinite number of solutions | 23) $(9, 6)$ | 24) $(5, -6)$ | |



Assignment

Solve each system by graphing.

$$1) \begin{aligned} -18 &= -6y + 3x \\ -9 &= y - 2x \end{aligned}$$

$$2) \begin{aligned} 0 &= 5y - 20 - 3x \\ -y &= 7 + \frac{8}{5}x \end{aligned}$$

$$3) \begin{aligned} 4y + 28 &= x \\ 8 &= -2y - x \end{aligned}$$

$$4) \begin{aligned} 0 &= -216 + 27y - 51x \\ -45 - 9y &= -4x \end{aligned}$$

$$5) \begin{aligned} 2x + 25 &= 5y \\ 2y + 6 + \frac{12}{5}x &= 0 \end{aligned}$$

$$6) \begin{aligned} 0 &= -x - y + 4 \\ -x &= -4 + y \end{aligned}$$

$$7) \begin{aligned} -3y &= -27 - 36x \\ -y - 4 - x &= 0 \end{aligned}$$

$$8) \begin{aligned} \frac{1}{5}y &= 1 + \frac{1}{30}x \\ 90 + 3x &= 18y \end{aligned}$$

$$9) \begin{aligned} -4y + 3x &= 32 \\ -32 + 4y &= -13x \end{aligned}$$

$$10) \begin{aligned} -16 + 17x &= -2y \\ -2y &= x + 16 \end{aligned}$$

$$11) \begin{aligned} 3x - 10 &= 2y \\ -3 - \frac{1}{16}x &= -\frac{1}{2}y \end{aligned}$$

$$12) \begin{aligned} 0 &= -6 - 6x + 3y \\ -6 - 6y &= -3x \end{aligned}$$

$$13) \begin{aligned} -49 + 7y - 6x &= 0 \\ \frac{56}{9} &= -x - \frac{7}{9}y \end{aligned}$$

$$14) \begin{aligned} y &= -8 - \frac{13}{6}x \\ -21 + 3y &= x \end{aligned}$$

$$15) \begin{aligned} -7y &= -14 - 6x \\ 0 &= 7y - 14 - 6x \end{aligned}$$

$$16) \begin{aligned} 14x &= -2y + 12 \\ -\frac{1}{2}x &= 7 + y \end{aligned}$$

$$17) \begin{aligned} -2x - 9 &= 3y \\ 0 &= 10x + 3y - 15 \end{aligned}$$

$$18) \begin{aligned} -2x - 5 - y &= 0 \\ 0 &= -4 + 2y - 3x \end{aligned}$$

$$19) \begin{aligned} 0 &= 3y - 3 - 3x \\ -7y + 2x + 42 &= 0 \end{aligned}$$

$$20) \begin{aligned} 0 &= -1 - \frac{5}{24}x - \frac{1}{3}y \\ 3x &= -32 + 4y \end{aligned}$$

$$21) \begin{aligned} 28 - x &= 7y \\ 12 + 11x &= 7y \end{aligned}$$

$$22) \begin{aligned} 18 &= -3y - 3x \\ 0 &= -y - 16x + 9 \end{aligned}$$



$$23) -\frac{3}{7}y = x - \frac{9}{7}$$

$$\frac{18}{7} = 2x + \frac{6}{7}y$$

$$24) -3 - 2x = -3y$$

$$-7x - 18 = -3y$$



Answers to Assignment (ID: 2)

- | | | | |
|----------------------------------|----------------------------------|--------------|-------------|
| 1) (8, 7) | 2) (-5, 1) | 3) (4, -6) | 4) (-9, -9) |
| 5) (-5, 3) | 6) Infinite number of solutions | 7) (-1, -3) | |
| 8) Infinite number of solutions | 9) (4, -5) | 10) (2, -9) | |
| 11) (8, 7) | 12) (-2, -2) | 13) (-7, 1) | 14) (-6, 5) |
| 15) Infinite number of solutions | 16) (2, -8) | 17) (3, -5) | |
| 18) (-2, -1) | 19) (7, 8) | 20) (-8, 2) | 21) (-7, 5) |
| 22) (1, -7) | 23) Infinite number of solutions | 24) (-3, -1) | |



Assignment

Solve each system by graphing.

$$1) \begin{aligned} -3 - 4x &= -3y \\ -15 &= 3y - 4x \end{aligned}$$

$$2) \begin{aligned} 9y &= 5x + 63 \\ 9y + 8x + 54 &= 0 \end{aligned}$$

$$3) \begin{aligned} -2x - 7y &= -28 \\ 9 &= -3y - \frac{27}{7}x \end{aligned}$$

$$4) \begin{aligned} -32x &= 2y - 18 \\ 9 &= 2x - y \end{aligned}$$

$$5) \begin{aligned} -y &= 4 \\ 0 &= -2 + 5x + 2y \end{aligned}$$

$$6) \begin{aligned} 18 &= -5x - 9y \\ 10x &= 18y - 144 \end{aligned}$$

$$7) \begin{aligned} 3x + 21 &= 0 \\ -6 &= -y + \frac{10}{7}x \end{aligned}$$

$$8) \begin{aligned} -y &= 9 \\ 0 &= -13x + 24 - 6y \end{aligned}$$

$$9) \begin{aligned} 32 &= -x + 4y \\ 4 &= x + 2y \end{aligned}$$

$$10) \begin{aligned} -8 + y &= 2x \\ 2x + 56 + 7y &= 0 \end{aligned}$$

$$11) \begin{aligned} 2y + 10 &= -3x \\ -18 + 2y + 3x &= 0 \end{aligned}$$

$$12) \begin{aligned} -21x &= -81 - 27y \\ -7x + 9y + 36 &= 0 \end{aligned}$$

$$13) \begin{aligned} 0 &= -x - \frac{1}{9}y + \frac{2}{3} \\ 4x &= 10 + 2y \end{aligned}$$

$$14) \begin{aligned} 9 &= -3x - y \\ -x &= -1 - \frac{1}{3}y \end{aligned}$$

$$15) \begin{aligned} 3x &= 5 + y \\ 5x - 3 &= -y \end{aligned}$$

$$16) \begin{aligned} 0 &= -2x + \frac{16}{3} - \frac{8}{3}y \\ 0 &= 8y + 40 - x \end{aligned}$$

$$17) \begin{aligned} 5y + 5 &= -2x \\ 2x + 15 &= 5y \end{aligned}$$

$$18) \begin{aligned} -x + \frac{10}{11} - \frac{5}{11}y &= 0 \\ -40 - x &= 5y \end{aligned}$$

$$19) \begin{aligned} 3y &= -12 + 3x \\ -y &= -x + 4 \end{aligned}$$

$$20) \begin{aligned} -7x &= -9y - 27 \\ -\frac{1}{27}x &= 1 - \frac{1}{3}y \end{aligned}$$

$$21) \begin{aligned} 5 &= -7x - 5y \\ 15 &= -x + 5y \end{aligned}$$

$$22) \begin{aligned} 0 &= 3y + 9 - 3x \\ -y - 9 + 7x &= 0 \end{aligned}$$



$$23) \begin{aligned} 5 + 3x + 5y &= 0 \\ 5y + 3x &= -45 \end{aligned}$$

$$24) \begin{aligned} 0 &= 3 - \frac{3}{5}y - \frac{2}{15}x \\ 13x + 9y + 54 &= 0 \end{aligned}$$



Answers to Assignment (ID: 3)

- 1) No solution
- 5) (2, -4)
- 9) (-8, 6)
- 13) (1, -3)
- 17) (-5, 1)
- 20) (9, 4)
- 24) (-9, 7)

- 2) (-9, 2)
- 6) (-9, 3)
- 10) (-7, -6)
- 14) (-1, -6)
- 18) (5, -9)
- 21) (5, -8)

- 3) (-7, 6)
- 7) (-7, -4)
- 11) No solution
- 15) (1, -2)
- 19) Infinite number of solutions
- 22) (1, -2)

- 4) (1, -7)
- 8) (6, -9)
- 12) No solution
- 16) (8, -4)
- 23) No solution



Assignment

Solve each system by graphing.

$$1) \begin{aligned} -32 + 9x &= 8y \\ -32 &= 9x - 8y \end{aligned}$$

$$2) \begin{aligned} -x &= 6 + y \\ -4y &= -12 - 14x \end{aligned}$$

$$3) \begin{aligned} 0 &= -x - \frac{21}{5} - \frac{3}{5}y \\ 0 &= 9y + 5x - 27 \end{aligned}$$

$$4) \begin{aligned} 36 - x + 4y &= 0 \\ 1 - \frac{7}{12}x &= \frac{1}{6}y \end{aligned}$$

$$5) \begin{aligned} -x - \frac{3}{2}y &= -\frac{15}{2} \\ -x + 3y + 12 &= 0 \end{aligned}$$

$$6) \begin{aligned} 9 &= x \\ 0 &= 4x + 45 - 9y \end{aligned}$$

$$7) \begin{aligned} 0 &= 3y - 12 - x \\ 0 &= 1 + \frac{5}{18}x + \frac{1}{3}y \end{aligned}$$

$$8) \begin{aligned} 3y - 2x &= -27 \\ 3y + 3 &= -6x \end{aligned}$$

$$9) \begin{aligned} -x - 12 &= -4y \\ 0 &= -x + 8 \end{aligned}$$

$$10) \begin{aligned} y &= -7 - 6x \\ 0 &= -y + 5 - 6x \end{aligned}$$

$$11) \begin{aligned} 0 &= 1 + \frac{1}{10}x + \frac{1}{5}y \\ -2y - 16 &= 4x \end{aligned}$$

$$12) \begin{aligned} 0 &= 9 + 2x + y \\ -12 &= -2y + x \end{aligned}$$

$$13) \begin{aligned} -35 - 7y &= -11x \\ -1 - \frac{1}{5}y + \frac{11}{35}x &= 0 \end{aligned}$$

$$14) \begin{aligned} \frac{1}{4}y - \frac{1}{32}x &= 2 \\ -17x &= -8y - 64 \end{aligned}$$

$$15) \begin{aligned} 0 &= -y - x - 7 \\ 0 &= -12 - x - 6y \end{aligned}$$

$$16) \begin{aligned} 0 &= -y + 5 - \frac{11}{3}x \\ 9 &= -y + x \end{aligned}$$

$$17) \begin{aligned} -1 - \frac{1}{5}y - \frac{2}{15}x &= 0 \\ 5x - 3y + 6 &= 0 \end{aligned}$$

$$18) \begin{aligned} 64 &= -8y - x \\ -4 &= -5x - 4y \end{aligned}$$

$$19) \begin{aligned} -x + 48 &= 6y \\ y - 1 &= x \end{aligned}$$

$$20) \begin{aligned} -x - 3 &= -y \\ -5 - 3x &= y \end{aligned}$$

$$21) \begin{aligned} 0 &= -18 + 3x - 2y \\ -18 &= 6v + 9x \end{aligned}$$

$$22) \begin{aligned} -y - 6 &= x \\ 7 &= y + x \end{aligned}$$



$$23) 3 = 3y + \frac{6}{7}x$$

$$0 = -x + \frac{7}{5}y - \frac{56}{5}$$

$$24) x - 2y = -16$$

$$-40 - 8y = 9x$$



Answers to Assignment (ID: 4)

- | | | | |
|----------------------------------|-----------------|-----------------|---------------|
| 1) No solution | 2) $(-2, -4)$ | 3) $(-9, 8)$ | 4) $(4, -8)$ |
| 5) $(9, -1)$ | 6) $(9, 9)$ | 7) $(-6, 2)$ | 8) $(3, -7)$ |
| 9) $(8, 5)$ | 10) No solution | 11) $(-2, -4)$ | 12) $(-6, 3)$ |
| 13) Infinite number of solutions | 14) $(8, 9)$ | 15) $(-6, -1)$ | |
| 16) $(3, -6)$ | 17) $(-3, -3)$ | 18) $(8, -9)$ | 19) $(6, 7)$ |
| 20) $(-2, 1)$ | 21) $(2, -6)$ | 22) No solution | 23) $(-7, 3)$ |
| 24) $(-8, 4)$ | | | |



Assignment

Solve each system by graphing.

$$1) \begin{aligned} 0 &= 5x - 1 + y \\ -4y - 32 &= 2x \end{aligned}$$

$$2) \begin{aligned} y &= 2x + 6 \\ -3x &= 20 + 4y \end{aligned}$$

$$3) \begin{aligned} -x &= 2y + 8 \\ 0 &= 3 - y - 4x \end{aligned}$$

$$4) \begin{aligned} 0 &= 6 - x \\ x &= 2y - 8 \end{aligned}$$

$$5) \begin{aligned} 10x + 9y + 81 &= 0 \\ -144 &= 14x - 18y \end{aligned}$$

$$6) \begin{aligned} 48 &= 6y - 3x \\ 8 - 4y &= x \end{aligned}$$

$$7) \begin{aligned} -y + 8 &= -16x \\ 24 &= -48x + 3y \end{aligned}$$

$$8) \begin{aligned} 1 - \frac{1}{5}y &= -\frac{3}{25}x \\ 0 &= -15y - 60 + 36x \end{aligned}$$

$$9) \begin{aligned} 12 &= 2x - 2y \\ -y - 2x &= 3 \end{aligned}$$

$$10) \begin{aligned} 3x &= 2y - 10 \\ 8y &= -6x - 32 \end{aligned}$$

$$11) \begin{aligned} 9y + 81 &= 11x \\ 81 - 7x &= 9y \end{aligned}$$

$$12) \begin{aligned} 9y - 63 &= 2x \\ -2x - 6y &= -12 \end{aligned}$$

$$13) \begin{aligned} x - 5 &= y \\ 7 &= 11x + y \end{aligned}$$

$$14) \begin{aligned} x &= -\frac{9}{2} - \frac{1}{2}y \\ -1 - 8x &= -y \end{aligned}$$

$$15) \begin{aligned} 3x &= 5y - 25 \\ 13x &= 25 + 5y \end{aligned}$$

$$16) \begin{aligned} -63 + 9y &= x \\ -27 - 5x &= 3y \end{aligned}$$

$$17) \begin{aligned} 216 - 21x &= 24y \\ 5x - 24 &= 8y \end{aligned}$$

$$18) \begin{aligned} 3 &= -y - \frac{2}{5}x \\ 5y - 15 - 4x &= 0 \end{aligned}$$

$$19) \begin{aligned} 4x - 7 &= y \\ 0 &= 2y - 14 - x \end{aligned}$$

$$20) \begin{aligned} 7y &= -63 + 5x \\ -56 &= -12x - 7y \end{aligned}$$

$$21) \begin{aligned} -x &= -14 + 2y \\ 5x &= 8y + 16 \end{aligned}$$

$$22) \begin{aligned} 3x + \frac{48}{5} - \frac{12}{5}y &= 0 \\ -56 &= x + 8y \end{aligned}$$



$$23) -\frac{1}{8}x = 1 + \frac{1}{8}y$$
$$1 = -x$$

$$24) 8x = 18y - 36$$
$$9 - 2x + \frac{3}{2}y = 0$$



Answers to Assignment (ID: 5)

1) (2, -9)

5) (-9, 1)

8) (5, 8)

12) (-9, 5)

16) (-9, 6)

20) (7, -4)

24) (9, 6)

2) (-4, -2)

6) (-8, 4)

9) (1, -5)

13) (1, -4)

17) (8, 2)

21) (8, 3)

3) (2, -5)

7) Infinite number of solutions

10) (-4, -1)

14) (-1, -7)

18) (-5, -1)

22) (-8, -6)

4) (6, 7)

11) (9, 2)

15) (5, 8)

19) (4, 9)

23) (-1, -7)



Assignment

Solve each system by graphing.

$$1) \begin{aligned} -16 + 13x &= -4y \\ 4y &= -x - 32 \end{aligned}$$

$$2) \begin{aligned} 6 + 9x &= y \\ -6 + 3x &= 3y \end{aligned}$$

$$3) \begin{aligned} 3x &= 12 + 3y \\ -y + 6x &= -6 \end{aligned}$$

$$4) \begin{aligned} 0 &= -y - 6 \\ -15x - 7y &= -63 \end{aligned}$$

$$5) \begin{aligned} -1 &= -y + \frac{3}{7}x \\ -7y + 11x &= 49 \end{aligned}$$

$$6) \begin{aligned} -162 + 32x - 18y &= 0 \\ 3y - 12 &= x \end{aligned}$$

$$7) \begin{aligned} -9 &= -y - 6x \\ -24 &= x + 3y \end{aligned}$$

$$8) \begin{aligned} -1 - \frac{7}{3}x &= -y \\ 2x &= -42 - 6y \end{aligned}$$

$$9) \begin{aligned} 6 + 4x &= -y \\ -y &= 1 - x \end{aligned}$$

$$10) \begin{aligned} 1 - \frac{1}{3}y + \frac{2}{21}x &= 0 \\ -14y - 14 &= 4x \end{aligned}$$

$$11) \begin{aligned} 0 &= 8y + 16 - 9x \\ 144 - 24y &= -3x \end{aligned}$$

$$12) \begin{aligned} 6x &= -54 - 9y \\ 0 &= 2x + 3y + 6 \end{aligned}$$

$$13) \begin{aligned} -7 &= 3x + 7y \\ 9 + x &= y \end{aligned}$$

$$14) \begin{aligned} 6 &= -5x + 2y \\ -16 &= 2y + 6x \end{aligned}$$

$$15) \begin{aligned} -21 - 3y - 2x &= 0 \\ 1 - \frac{1}{2}x + \frac{1}{2}y &= 0 \end{aligned}$$

$$16) \begin{aligned} 6x - 4y &= 16 \\ 2y &= -x + 16 \end{aligned}$$

$$17) \begin{aligned} 3 - y + 2x &= 0 \\ y + 3x + 7 &= 0 \end{aligned}$$

$$18) \begin{aligned} 0 &= -8y + x + 56 \\ y &= -4 + \frac{3}{2}x \end{aligned}$$

$$19) \begin{aligned} -12 &= -3y - 18x \\ -6 - x &= y \end{aligned}$$

$$20) \begin{aligned} -28 &= 4y + 3x \\ x &= -2 + \frac{1}{2}y \end{aligned}$$

$$21) \begin{aligned} -x &= -y - 1 \\ 2y + x &= 16 \end{aligned}$$

$$22) \begin{aligned} 112 + 16y &= -18x \\ 0 &= 1 + \frac{1}{8}x \end{aligned}$$



$$23) -1 + \frac{4}{7}x - \frac{1}{3}y = 0$$

$$12x + 14 - 7y = 0$$

$$24) 0 = 1 + \frac{1}{9}y - \frac{2}{9}x$$

$$5 = -2x - y$$



Answers to Assignment (ID: 6)

1) (4, -9)

5) (7, 4)

9) (-1, -2)

13) (-7, 2)

17) (-2, -1)

21) (6, 5)

2) (-1, -3)

6) (9, 7)

10) (-7, 1)

14) (-2, -2)

18) (8, 8)

22) (-8, 2)

3) (-2, -6)

7) (3, -9)

11) (8, 7)

15) (-3, -5)

19) (2, -8)

23) No solution

4) (7, -6)

8) (-3, -6)

12) No solution

16) (6, 5)

20) (-4, -4)

24) (1, -7)



Assignment

Solve each system by graphing.

$$\begin{aligned} 1) \quad & 4y = -x + 4 \\ & x + 5 = -y \end{aligned}$$

$$\begin{aligned} 2) \quad & 0 = 6y + 18 + 4x \\ & x - y = -2 \end{aligned}$$

$$\begin{aligned} 3) \quad & -5 = -7x + 5y \\ & -2x = -40 + 5y \end{aligned}$$

$$\begin{aligned} 4) \quad & 4y + 4 - 3x = 0 \\ & -3x = -y + 8 \end{aligned}$$

$$\begin{aligned} 5) \quad & -5 + 2x = 5y \\ & 20 = -x - 5y \end{aligned}$$

$$\begin{aligned} 6) \quad & 0 = 48 - 6y + x \\ & 7x - 3y = 15 \end{aligned}$$

$$\begin{aligned} 7) \quad & -20 + 5y + 7x = 0 \\ & 35 = -5y + 4x \end{aligned}$$

$$\begin{aligned} 8) \quad & 0 = 3y + 4x + 27 \\ & 0 = -4x + 12 - 3y \end{aligned}$$

$$\begin{aligned} 9) \quad & -4y - 8 = -9x \\ & -24 = 8y - 18x \end{aligned}$$

$$\begin{aligned} 10) \quad & 0 = y + 7x - 1 \\ & y + 5 = -x \end{aligned}$$

$$\begin{aligned} 11) \quad & 27x - 45 = -15y \\ & 20 + 5y = -2x \end{aligned}$$

$$\begin{aligned} 12) \quad & -5x = -12 + 2y \\ & 12y = -2x - 96 \end{aligned}$$

$$\begin{aligned} 13) \quad & -x = 8 + y \\ & \frac{24}{25}x = -3 + \frac{3}{5}y \end{aligned}$$

$$\begin{aligned} 14) \quad & 27x = 12y + 24 \\ & -3x - 16 = -4y \end{aligned}$$

$$\begin{aligned} 15) \quad & -8y + 3x = 16 \\ & 1 - \frac{1}{5}y = \frac{1}{10}x \end{aligned}$$

$$\begin{aligned} 16) \quad & y = -7 + x \\ & 0 = 16 - 4y + 26x \end{aligned}$$

$$\begin{aligned} 17) \quad & -27y = 3x - 81 \\ & 81 + 9y = -13x \end{aligned}$$

$$\begin{aligned} 18) \quad & 0 = 2y + 4 \\ & 4 = -x + y \end{aligned}$$

$$\begin{aligned} 19) \quad & -3y = -2x + 3 \\ & -13x - 48 = -6y \end{aligned}$$

$$\begin{aligned} 20) \quad & -20 = -3x + 4y \\ & 4y = 3x - 8 \end{aligned}$$

$$\begin{aligned} 21) \quad & -x + \frac{63}{11} = -\frac{9}{11}y \\ & -72 - 9y = -11x \end{aligned}$$

$$\begin{aligned} 22) \quad & -y + 2x = 4 \\ & 3x - 6y = 42 \end{aligned}$$



$$\begin{aligned} 23) \quad 3y - 21 - x &= 0 \\ -5x + y + 7 &= 0 \end{aligned}$$

$$24) \quad 0 = -x - \frac{1}{3}y - \frac{8}{3}$$

$$\frac{1}{4}y = x - \frac{1}{4}$$



Answers to Assignment (ID: 7)

1) $(-8, 3)$

5) $(-5, -3)$

9) No solution

13) $(-5, -3)$

17) $(-9, 4)$

21) No solution

2) $(-3, -1)$

6) $(6, 9)$

10) $(1, -6)$

14) $(4, 7)$

18) $(-6, -2)$

22) $(-2, -8)$

3) $(5, 6)$

7) $(5, -3)$

11) $(5, -6)$

15) $(8, 1)$

19) $(-6, -5)$

23) $(3, 8)$

4) $(-4, -4)$

8) No solution

12) $(6, -9)$

16) $(-2, -9)$

20) No solution

24) $(-1, -5)$



Assignment

Solve each system by graphing.

$$1) \begin{cases} -54 = 10x - 6y \\ y + x + 7 = 0 \end{cases}$$

$$2) \begin{cases} -3y - x + 27 = 0 \\ 5x - 7 = y \end{cases}$$

$$3) \begin{cases} 2y = -12 + \frac{16}{7}x \\ 3x + 7y = 35 \end{cases}$$

$$4) \begin{cases} 0 = 4y + 2x - 36 \\ -\frac{8}{9}y - \frac{32}{9} = -x \end{cases}$$

$$5) \begin{cases} 8 = -4x - y \\ 4x = -1 - y \end{cases}$$

$$6) \begin{cases} 3y = x - 18 \\ 5 - y = -4x \end{cases}$$

$$7) \begin{cases} 9x + 56 = 7y \\ -y = 8 - \frac{9}{7}x \end{cases}$$

$$8) \begin{cases} -7x + 32 + 4y = 0 \\ x = -16 + 4y \end{cases}$$

$$9) \begin{cases} 2y + 18 = -5x \\ 28 - 4y = -22x \end{cases}$$

$$10) \begin{cases} 2y = 10 + 4x \\ 0 = 8 - y + \frac{1}{2}x \end{cases}$$

$$11) \begin{cases} 12 + 3y = 3x \\ -1 + \frac{5}{42}x + \frac{1}{7}y = 0 \end{cases}$$

$$12) \begin{cases} \frac{1}{3}y = 1 \\ -12 + 3x = 2y \end{cases}$$

$$13) \begin{cases} x = 18 + 3y \\ -11x = -3y + 12 \end{cases}$$

$$14) \begin{cases} -10x + 6y = 42 \\ -9y = -x + 63 \end{cases}$$

$$15) \begin{cases} -\frac{9}{2} - \frac{1}{2}y = x \\ -5 - y = 2x \end{cases}$$

$$16) \begin{cases} -8y = -22x - 40 \\ -y = -1 - \frac{11}{4}x \end{cases}$$

$$17) \begin{cases} 4x = -14 + 7y \\ 0 = 7y - 13x + 49 \end{cases}$$

$$18) \begin{cases} 7 = -x - y \\ -12 = -15x - 2y \end{cases}$$

$$19) \begin{cases} 0 = x + 9 + y \\ 2x - y = 6 \end{cases}$$

$$20) \begin{cases} -x - 5y = -25 \\ -5y = -5 - 3x \end{cases}$$

$$21) \begin{cases} 0 = -1 + \frac{2}{63}x + \frac{1}{9}y \\ -35 = 7y - 12x \end{cases}$$

$$22) \begin{cases} -x - y = 8 \\ 0 = 6x + 3 + y \end{cases}$$



$$23) \begin{aligned} -8 - 2y &= -x \\ -3 + y - \frac{9}{4}x &= 0 \end{aligned}$$

$$24) \begin{aligned} 18 &= -3y - 4x \\ -3y &= -6x - 12 \end{aligned}$$



Answers to Assignment (ID: 8)

1) $(-6, -1)$

5) No solution

9) $(-2, -4)$

13) $(-3, -7)$

17) $(7, 6)$

21) $(7, 7)$

2) $(3, 8)$

6) $(-3, -7)$

10) $(2, 9)$

14) $(-9, -8)$

18) $(2, -9)$

22) $(1, -9)$

3) $(7, 2)$

7) No solution

11) $(6, 2)$

15) No solution

19) $(-1, -8)$

23) $(-4, -6)$

4) $(8, 5)$

8) $(8, 6)$

12) $(6, 3)$

16) No solution

20) $(5, 4)$

24) $(-3, -2)$



Assignment

Solve each system by graphing.

$$1) \begin{cases} -2x + 3y = 21 \\ 5x + 36 + 9y = 0 \end{cases}$$

$$2) \begin{cases} -5y + 25 = x \\ 2y + 2x = 18 \end{cases}$$

$$3) \begin{cases} x + 3y = 27 \\ -3 = -y + \frac{2}{3}x \end{cases}$$

$$4) \begin{cases} -2y - 28x = -12 \\ -4 - 14x = y \end{cases}$$

$$5) \begin{cases} -y = -9 - \frac{14}{5}x \\ -5y = x + 30 \end{cases}$$

$$6) \begin{cases} 8y - 18x = 56 \\ -8y = 56 + 10x \end{cases}$$

$$7) \begin{cases} 9y - 4x = 54 \\ -12 - 2x - 3y = 0 \end{cases}$$

$$8) \begin{cases} 4x - 3y + 12 = 0 \\ -27y = 162 - 6x \end{cases}$$

$$9) \begin{cases} 4 + 2x = 2y \\ -18y + 3x = -126 \end{cases}$$

$$10) \begin{cases} -\frac{1}{4}x = 4 - y \\ 3 + y = 2x \end{cases}$$

$$11) \begin{cases} -2y + x = -2 \\ 2x + 9 = -y \end{cases}$$

$$12) \begin{cases} -12y + 14x = -36 \\ -18 + x = 6y \end{cases}$$

$$13) \begin{cases} -x = -2y + 6 \\ 0 = 7x - 8 - 4y \end{cases}$$

$$14) \begin{cases} 5y + 40 = 17x \\ 25 - 5y = -4x \end{cases}$$

$$15) \begin{cases} \frac{36}{5} + \frac{9}{10}y = x \\ 12 - x - \frac{3}{2}y = 0 \end{cases}$$

$$16) \begin{cases} -2 + x = 2y \\ 2y = 3x + 10 \end{cases}$$

$$17) \begin{cases} 12x = y - 5 \\ -y = 8 + x \end{cases}$$

$$18) \begin{cases} 10 + x = -5y \\ 8x = -5y - 45 \end{cases}$$

$$19) \begin{cases} -45 + 2x = -9y \\ -72 = 9y - 11x \end{cases}$$

$$20) \begin{cases} \frac{1}{5}y - \frac{11}{5}x = 1 \\ 0 = -2x - y - 8 \end{cases}$$

$$21) \begin{cases} 4x - 7 = y \\ x - 2v = -14 \end{cases}$$

$$22) \begin{cases} 63 = -6x - 7y \\ -7y - 7 = -2x \end{cases}$$



$$23) \quad y - \frac{7}{3}x = -1$$
$$3y + 2x = 24$$

$$24) \quad -3x - 8 - 4y = 0$$
$$32 - 4y = 13x$$



Answers to Assignment (ID: 9)

1) $(-9, 1)$

5) $(-5, -5)$

9) $(6, 8)$

13) $(4, 5)$

17) $(-1, -7)$

21) $(4, 9)$

2) $(5, 4)$

6) $(-4, -2)$

10) $(4, 5)$

14) $(5, 9)$

18) $(-5, -1)$

22) $(-7, -3)$

3) $(6, 7)$

7) $(-9, 2)$

11) $(-4, -1)$

15) $(9, 2)$

19) $(9, 3)$

23) $(3, 6)$

4) No solution

8) $(-9, -8)$

12) $(-6, -4)$

16) $(-6, -4)$

20) $(-1, -6)$

24) $(4, -5)$



Assignment

Solve each system by graphing.

$$1) \begin{aligned} 48 - 9x &= -8y \\ -4 &= x - 4y \end{aligned}$$

$$2) \begin{aligned} -16 + 2y &= -x \\ 7x - 7 &= y \end{aligned}$$

$$3) \begin{aligned} 15x + 18 &= 2y \\ x &= -8 - y \end{aligned}$$

$$4) \begin{aligned} 32 - 17x &= 4y \\ -14 &= 2y + x \end{aligned}$$

$$5) \begin{aligned} 10x &= 14y - 28 \\ -7y - 49 &= 4x \end{aligned}$$

$$6) \begin{aligned} -x + 3 &= -3y \\ 36 - 5x &= 6y \end{aligned}$$

$$7) \begin{aligned} 24 &= -8y + 7x \\ 0 &= 72 - 5x - 8y \end{aligned}$$

$$8) \begin{aligned} 3 - x &= -y \\ 0 &= 21 - 3y + 18x \end{aligned}$$

$$9) \begin{aligned} 2y &= 9x + 18 \\ 32 + 4y - x &= 0 \end{aligned}$$

$$10) \begin{aligned} 0 &= -80 - 16y - 6x \\ 56 + 9x - 8y &= 0 \end{aligned}$$

$$11) \begin{aligned} x - \frac{9}{8} &= \frac{1}{8}y \\ -x &= y - 9 \end{aligned}$$

$$12) \begin{aligned} 7 - 2x &= -\frac{7}{4}y \\ 3x + 7y - 49 &= 0 \end{aligned}$$

$$13) \begin{aligned} x &= 8 - 2y \\ 0 &= 18y - 15x + 72 \end{aligned}$$

$$14) \begin{aligned} 12 &= -3y + x \\ 9y &= 39x + 72 \end{aligned}$$

$$15) \begin{aligned} 0 &= 20 + 4y - 3x \\ 1 - \frac{1}{7}y &= -\frac{15}{28}x \end{aligned}$$

$$16) \begin{aligned} 0 &= 16 - 2y \\ -\frac{1}{10}y - \frac{1}{5} &= -x \end{aligned}$$

$$17) \begin{aligned} 4 &= 4y - x \\ x + \frac{64}{9} &= \frac{8}{9}y \end{aligned}$$

$$18) \begin{aligned} -14 - 2y &= -4x \\ 0 &= -27 + 3y + 2x \end{aligned}$$

$$19) \begin{aligned} x + 5 &= 5y \\ 3x - 3y - 9 &= 0 \end{aligned}$$

$$20) \begin{aligned} -3 - y + 11x &= 0 \\ -x &= y - 9 \end{aligned}$$

$$21) \begin{aligned} -5 - x &= 0 \\ 0 &= -5y + x - 30 \end{aligned}$$

$$22) \begin{aligned} x + 9 &= -\frac{3}{2}y \\ x &= y + 1 \end{aligned}$$



$$\begin{aligned} 23) \quad 0 &= y - 2 \\ 4y &= 7x - 20 \end{aligned}$$

$$\begin{aligned} 24) \quad 0 &= -1 - \frac{1}{7}y - \frac{2}{21}x \\ 9y &= 81 + 10x \end{aligned}$$



Answers to Assignment (ID: 10)

1) (8, 3)

5) (-7, -3)

9) (-4, -9)

13) (6, 1)

17) (-8, -1)

21) (-5, -7)

2) (2, 7)

6) (6, 1)

10) (-8, -2)

14) (-3, -5)

18) (6, 5)

22) (-3, -4)

3) (-2, -6)

7) (8, 4)

11) (2, 7)

15) (-4, -8)

19) (5, 2)

23) (4, 2)

4) (4, -9)

8) (-2, -5)

12) (7, 4)

16) (1, 8)

20) (1, 8)

24) (-9, -1)

