

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) J(-8, 4), I(2, 4), H(-6, 1)

A)  $\left(-\frac{13}{3}, \frac{7}{3}\right)$       B) (-4, 3)

C)  $\left(-\frac{10}{3}, \frac{10}{3}\right)$       D)  $\left(-4, \frac{11}{3}\right)$

2) E(-4, 2), F(2, 2), G(1, 7)

A)  $\left(-\frac{1}{3}, \frac{13}{3}\right)$       B)  $\left(-\frac{2}{3}, 3\right)$

C)  $\left(-1, \frac{11}{3}\right)$       D)  $\left(-\frac{1}{3}, \frac{11}{3}\right)$

3) N(-8, 1), M(3, 6), L(12, 1)

A)  $\left(\frac{8}{3}, 3\right)$       B)  $\left(\frac{7}{3}, \frac{8}{3}\right)$

C) (3, 2)      D)  $\left(3, \frac{10}{3}\right)$

4) T(-6, 9), S(4, -8), R(-3, -8)

A)  $\left(-\frac{7}{3}, -\frac{5}{3}\right)$       B)  $\left(-\frac{5}{3}, -\frac{7}{3}\right)$

C)  $\left(-\frac{7}{3}, -3\right)$       D)  $\left(-\frac{4}{3}, -\frac{7}{3}\right)$

5) F(10, -4), G(-5, -4), H(-7, -1)

A)  $\left(-\frac{1}{3}, -\frac{11}{3}\right)$       B)  $\left(-\frac{2}{3}, -3\right)$

C)  $\left(-\frac{1}{3}, -\frac{7}{3}\right)$       D)  $\left(0, -\frac{7}{3}\right)$

6) U(7, -2), V(-7, 5), W(4, -2)

A)  $\left(\frac{4}{3}, 1\right)$       B)  $\left(2, \frac{2}{3}\right)$

C)  $\left(\frac{4}{3}, \frac{1}{3}\right)$       D)  $\left(\frac{5}{3}, 1\right)$

7) D(7, 0), E(-6, 3), F(8, 3)

A)  $\left(\frac{7}{3}, \frac{7}{3}\right)$       B) (3, 2)

C)  $\left(\frac{8}{3}, \frac{5}{3}\right)$       D)  $\left(\frac{11}{3}, \frac{8}{3}\right)$

8) A(7, -8), B(-8, -8), C(-5, 0)

A)  $\left(-2, -\frac{16}{3}\right)$       B)  $\left(-\frac{8}{3}, -\frac{16}{3}\right)$

C)  $\left(-\frac{8}{3}, -\frac{17}{3}\right)$       D)  $\left(-\frac{7}{3}, -5\right)$

9) X(-8, -8), Y(1, 10), Z(9, -8)

A)  $\left(0, -\frac{4}{3}\right)$       B)  $\left(\frac{2}{3}, -2\right)$

C)  $\left(\frac{1}{3}, -\frac{5}{3}\right)$       D)  $\left(0, -\frac{7}{3}\right)$

10) M(-1, 6), L(10, -7), K(-7, -7)

A)  $\left(0, -\frac{10}{3}\right)$       B) (0, -2)

C)  $\left(\frac{4}{3}, -\frac{10}{3}\right)$       D)  $\left(\frac{2}{3}, -\frac{8}{3}\right)$

11) G(-3, 6), H(4, -1), I(7, 6)

A)  $\left(\frac{8}{3}, \frac{11}{3}\right)$       B) (3, 3)

C)  $\left(2, \frac{13}{3}\right)$       D) (2, 3)

12) S(2, -1), R(-3, -1), Q(-4, 3)

A)  $\left(-\frac{5}{3}, \frac{1}{3}\right)$       B)  $\left(-1, \frac{2}{3}\right)$

C)  $\left(-\frac{7}{3}, \frac{2}{3}\right)$       D)  $\left(-\frac{7}{3}, 0\right)$



13) C(4, -8), D(-6, -8), E(7, -3)

A)  $\left(\frac{5}{3}, -\frac{19}{3}\right)$       B)  $\left(\frac{7}{3}, -6\right)$

C)  $\left(\frac{5}{3}, -\frac{17}{3}\right)$       D)  $\left(\frac{4}{3}, -\frac{17}{3}\right)$

15) T(-8, -7), U(11, -7), V(-8, 0)

A) (-1, -4)      B)  $\left(-\frac{5}{3}, -\frac{14}{3}\right)$

C)  $\left(-\frac{5}{3}, -\frac{16}{3}\right)$       D)  $\left(-2, -\frac{16}{3}\right)$

17) K(6, -3), J(1, 3), I(-6, -3)

A)  $\left(1, -\frac{4}{3}\right)$       B)  $\left(\frac{1}{3}, -1\right)$

C)  $\left(1, -\frac{2}{3}\right)$       D)  $\left(\frac{2}{3}, -1\right)$

19) P(7, 0), Q(0, 4), R(-7, 0)

A)  $\left(\frac{1}{3}, \frac{2}{3}\right)$       B)  $\left(-\frac{1}{3}, 1\right)$

C)  $\left(0, \frac{5}{3}\right)$       D)  $\left(0, \frac{4}{3}\right)$

21) D(5, -4), C(-7, -4), B(-6, -6)

A) (-3, -5)      B)  $\left(-\frac{8}{3}, -5\right)$

C)  $\left(-\frac{8}{3}, -\frac{14}{3}\right)$       D) (-3, -4)

23) E(-7, -7), F(1, 10), G(6, -7)

A)  $\left(-\frac{2}{3}, -\frac{2}{3}\right)$       B)  $\left(\frac{1}{3}, -\frac{2}{3}\right)$

C)  $\left(-\frac{1}{3}, -1\right)$       D)  $\left(0, -\frac{4}{3}\right)$

14) X(-1, -4), Y(-6, -4), Z(-4, 4)

A) (-3, -1)      B)  $\left(-\frac{11}{3}, -\frac{4}{3}\right)$

C)  $\left(-\frac{13}{3}, -\frac{2}{3}\right)$       D) (-4, -2)

16) F(10, -4), G(-7, -4), H(3, 5)

A) (2, -1)      B)  $\left(\frac{8}{3}, -\frac{4}{3}\right)$

C)  $\left(2, -\frac{5}{3}\right)$       D)  $\left(\frac{8}{3}, -\frac{2}{3}\right)$

18) S(6, -7), T(5, 3), U(4, -7)

A)  $\left(5, -\frac{11}{3}\right)$       B)  $\left(\frac{14}{3}, -\frac{13}{3}\right)$

C)  $\left(\frac{16}{3}, -4\right)$       D)  $\left(\frac{13}{3}, -\frac{11}{3}\right)$

20) S(-6, 3), T(1, 3), U(4, -3)

A)  $\left(-\frac{2}{3}, \frac{2}{3}\right)$       B)  $\left(-\frac{2}{3}, 1\right)$

C)  $\left(0, \frac{4}{3}\right)$       D)  $\left(-\frac{1}{3}, 1\right)$

22) V(-7, 8), W(-5, 2), X(-1, 2)

A)  $\left(-4, \frac{13}{3}\right)$       B)  $\left(-\frac{13}{3}, 4\right)$

C)  $\left(-\frac{14}{3}, \frac{11}{3}\right)$       D) (-4, 4)

24) J(3, 10), I(8, -8), H(-4, -8)

A)  $\left(\frac{7}{3}, -2\right)$       B) (2, -2)

C)  $\left(\frac{8}{3}, -\frac{5}{3}\right)$       D)  $\left(\frac{7}{3}, -\frac{7}{3}\right)$



## Answers to Assignment (ID: 1)

1) B  
5) B  
9) B  
13) A  
17) B  
21) C

2) D  
6) C  
10) D  
14) B  
18) A  
22) B

3) B  
7) B  
11) A  
15) B  
19) D  
23) D

4) B  
8) A  
12) A  
16) A  
20) D  
24) A



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) K(0, 7), L(7, 3), M(-8, 3)

A)  $\left(-1, \frac{14}{3}\right)$       B)  $\left(-\frac{2}{3}, \frac{13}{3}\right)$

C)  $\left(-\frac{1}{3}, \frac{13}{3}\right)$       D)  $\left(-\frac{1}{3}, 4\right)$

2) K(-6, -1), L(5, 7), M(-6, 7)

A)  $\left(-\frac{7}{3}, \frac{13}{3}\right)$       B)  $\left(-\frac{5}{3}, 5\right)$

C)  $\left(-\frac{5}{3}, \frac{11}{3}\right)$       D)  $\left(-\frac{5}{3}, 4\right)$

3) R(8, 2), S(-7, -4), T(-8, 2)

A)  $\left(-\frac{7}{3}, 0\right)$       B)  $\left(-\frac{7}{3}, \frac{1}{3}\right)$

C)  $\left(-3, \frac{2}{3}\right)$       D)  $\left(-\frac{5}{3}, 0\right)$

4) C(-7, 8), B(-2, 8), A(4, -7)

A)  $\left(-\frac{5}{3}, 3\right)$       B)  $\left(-1, \frac{10}{3}\right)$

C)  $\left(-1, \frac{8}{3}\right)$       D)  $\left(-1, \frac{7}{3}\right)$

5) U(-7, 5), V(6, 5), W(-3, -3)

A)  $\left(-\frac{4}{3}, \frac{7}{3}\right)$       B)  $\left(-1, \frac{5}{3}\right)$

C)  $\left(-\frac{4}{3}, \frac{8}{3}\right)$       D)  $\left(-\frac{2}{3}, \frac{8}{3}\right)$

6) G(6, 8), H(12, 5), I(-7, 8)

A)  $\left(4, \frac{22}{3}\right)$       B)  $\left(\frac{11}{3}, 7\right)$

C)  $\left(3, \frac{20}{3}\right)$       D)  $\left(\frac{11}{3}, \frac{22}{3}\right)$

7) J(6, -5), K(4, -2), L(-5, -5)

A)  $\left(\frac{5}{3}, -4\right)$       B)  $\left(1, -\frac{11}{3}\right)$

C)  $\left(\frac{7}{3}, -\frac{14}{3}\right)$       D) (1, -4)

8) X(-5, 5), W(3, -5), V(6, 5)

A)  $\left(\frac{2}{3}, \frac{5}{3}\right)$       B)  $\left(1, \frac{7}{3}\right)$

C)  $\left(\frac{4}{3}, \frac{5}{3}\right)$       D)  $\left(\frac{2}{3}, \frac{7}{3}\right)$

9) D(11, -8), E(1, 1), F(-8, -8)

A)  $\left(\frac{2}{3}, -\frac{14}{3}\right)$       B)  $\left(1, -\frac{14}{3}\right)$

C)  $\left(\frac{4}{3}, -5\right)$       D)  $\left(1, -\frac{13}{3}\right)$

10) S(1, -5), R(5, 7), Q(-5, -5)

A)  $\left(-\frac{1}{3}, -\frac{4}{3}\right)$       B)  $\left(\frac{1}{3}, -1\right)$

C)  $\left(1, -\frac{1}{3}\right)$       D)  $\left(\frac{2}{3}, -\frac{5}{3}\right)$

11) T(-4, 9), U(8, 9), V(7, -7)

A)  $\left(\frac{10}{3}, 3\right)$       B)  $\left(4, \frac{11}{3}\right)$

C)  $\left(3, \frac{11}{3}\right)$       D)  $\left(\frac{11}{3}, \frac{11}{3}\right)$

12) E(9, -4), D(-7, -4), C(-4, 5)

A)  $\left(-\frac{2}{3}, -1\right)$       B)  $\left(-\frac{4}{3}, -1\right)$

C) (0, -1)      D)  $\left(-\frac{1}{3}, -\frac{5}{3}\right)$



13)  $Y(-7, -6), X(-3, 1), W(7, -6)$

A)  $\left(-\frac{5}{3}, -4\right)$       B)  $\left(-\frac{2}{3}, -3\right)$

C)  $\left(-1, -\frac{11}{3}\right)$       D)  $\left(-\frac{2}{3}, -\frac{11}{3}\right)$

14)  $F(-7, 7), G(9, 4), H(-3, 4)$

A)  $(-1, 5)$       B)  $\left(-\frac{1}{3}, \frac{14}{3}\right)$

C)  $\left(0, \frac{14}{3}\right)$       D)  $\left(-\frac{1}{3}, 5\right)$

15)  $I(-7, -7), J(5, 2), K(8, -7)$

A)  $(2, -4)$       B)  $\left(2, -\frac{13}{3}\right)$

C)  $\left(\frac{4}{3}, -4\right)$       D)  $\left(\frac{4}{3}, -\frac{11}{3}\right)$

16)  $S(0, -2), T(6, 4), U(6, -2)$

A)  $\left(\frac{11}{3}, -\frac{1}{3}\right)$       B)  $\left(4, -\frac{1}{3}\right)$

C)  $\left(\frac{13}{3}, 0\right)$       D)  $(4, 0)$

17)  $L(0, -7), M(-5, 7), N(-7, -7)$

A)  $\left(-4, -\frac{7}{3}\right)$       B)  $\left(-\frac{14}{3}, -\frac{5}{3}\right)$

C)  $\left(-\frac{13}{3}, -\frac{7}{3}\right)$       D)  $\left(-\frac{14}{3}, -2\right)$

18)  $R(-8, 6), Q(9, 6), P(6, -7)$

A)  $\left(\frac{7}{3}, \frac{5}{3}\right)$       B)  $\left(\frac{5}{3}, \frac{5}{3}\right)$

C)  $\left(\frac{7}{3}, 1\right)$       D)  $(3, 2)$

19)  $V(1, 10), W(-2, -7), X(-6, -7)$

A)  $\left(-\frac{5}{3}, -\frac{2}{3}\right)$       B)  $\left(-\frac{8}{3}, -1\right)$

C)  $\left(-\frac{7}{3}, -\frac{4}{3}\right)$       D)  $\left(-2, -\frac{5}{3}\right)$

20)  $D(4, 7), C(-7, -8), B(7, -8)$

A)  $(2, -3)$       B)  $\left(\frac{5}{3}, -\frac{11}{3}\right)$

C)  $\left(\frac{4}{3}, -3\right)$       D)  $\left(\frac{5}{3}, -\frac{10}{3}\right)$

21)  $E(-3, -8), F(7, -8), G(-7, 0)$

A)  $\left(-1, -\frac{16}{3}\right)$       B)  $\left(-\frac{1}{3}, -\frac{16}{3}\right)$

C)  $\left(-\frac{1}{3}, -6\right)$       D)  $(-1, -6)$

22)  $K(-4, 7), L(4, 7), M(-6, -7)$

A)  $\left(-\frac{5}{3}, 3\right)$       B)  $\left(-2, \frac{7}{3}\right)$

C)  $\left(-\frac{5}{3}, \frac{8}{3}\right)$       D)  $\left(-\frac{4}{3}, \frac{7}{3}\right)$

23)  $H(-8, -6), I(1, 7), J(6, -6)$

A)  $(-1, -1)$       B)  $(-1, -2)$

C)  $\left(0, -\frac{4}{3}\right)$       D)  $\left(-\frac{1}{3}, -\frac{5}{3}\right)$

24)  $Z(0, -7), Y(-6, -7), X(-4, -6)$

A)  $\left(-\frac{10}{3}, -\frac{20}{3}\right)$       B)  $\left(-\frac{10}{3}, -7\right)$

C)  $\left(-\frac{11}{3}, -7\right)$       D)  $\left(-3, -\frac{19}{3}\right)$



## Answers to Assignment (ID: 2)

1) C  
5) A  
9) C  
13) C  
17) A  
21) A

2) A  
6) B  
10) B  
14) D  
18) A  
22) B

3) A  
7) A  
11) D  
15) A  
19) C  
23) D

4) A  
8) C  
12) A  
16) D  
20) C  
24) A



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) T(-8, -1), S(-5, 4), R(10, -1)

A)  $\left(-\frac{2}{3}, 0\right)$       B)  $\left(-\frac{5}{3}, \frac{1}{3}\right)$

C)  $\left(-\frac{2}{3}, 1\right)$       D)  $\left(-1, \frac{2}{3}\right)$

2) U(1, -2), V(13, 5), W(-7, 5)

A)  $\left(\frac{7}{3}, \frac{8}{3}\right)$       B)  $\left(2, \frac{10}{3}\right)$

C)  $\left(\frac{8}{3}, 2\right)$       D) (3, 2)

3) Z(-5, 7), Y(6, -8), X(-3, -8)

A)  $\left(-\frac{2}{3}, -3\right)$       B)  $\left(-\frac{4}{3}, -3\right)$

C)  $\left(-1, -\frac{10}{3}\right)$       D)  $\left(0, -\frac{11}{3}\right)$

4) G(4, -2), H(-1, -7), I(7, -7)

A)  $\left(\frac{10}{3}, -\frac{16}{3}\right)$       B)  $\left(\frac{10}{3}, -\frac{14}{3}\right)$

C)  $\left(4, -\frac{16}{3}\right)$       D)  $\left(\frac{8}{3}, -5\right)$

5) X(0, -5), W(10, -7), V(-7, -7)

A)  $\left(\frac{5}{3}, -\frac{20}{3}\right)$       B)  $\left(1, -\frac{19}{3}\right)$

C)  $\left(\frac{2}{3}, -\frac{19}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{19}{3}\right)$

6) D(6, -3), E(-7, 0), F(-7, -3)

A)  $\left(-\frac{7}{3}, -\frac{7}{3}\right)$       B)  $\left(-\frac{8}{3}, -2\right)$

C)  $\left(-3, -\frac{7}{3}\right)$       D)  $\left(-3, -\frac{5}{3}\right)$

7) J(5, -2), K(-6, -2), L(-3, 2)

A)  $\left(-\frac{4}{3}, 0\right)$       B)  $\left(-2, -\frac{1}{3}\right)$

C)  $\left(-\frac{2}{3}, -1\right)$       D)  $\left(-\frac{4}{3}, -\frac{2}{3}\right)$

8) S(-8, -7), R(0, 3), Q(12, -7)

A)  $\left(\frac{2}{3}, -\frac{13}{3}\right)$       B)  $\left(\frac{5}{3}, -4\right)$

C)  $\left(\frac{4}{3}, -\frac{11}{3}\right)$       D) (2, -4)

9) T(10, 7), U(-7, 7), V(0, -7)

A)  $\left(1, \frac{7}{3}\right)$       B)  $\left(\frac{4}{3}, \frac{5}{3}\right)$

C)  $\left(\frac{5}{3}, 3\right)$       D)  $\left(\frac{4}{3}, \frac{8}{3}\right)$

10) W(8, 1), X(7, -7), Y(-8, -7)

A)  $\left(3, -\frac{11}{3}\right)$       B)  $\left(\frac{7}{3}, -\frac{13}{3}\right)$

C)  $\left(\frac{7}{3}, -4\right)$       D)  $\left(3, -\frac{13}{3}\right)$

11) C(9, -5), D(-7, 6), E(3, 6)

A)  $\left(\frac{4}{3}, \frac{8}{3}\right)$       B) (1, 3)

C)  $\left(\frac{5}{3}, \frac{7}{3}\right)$       D)  $\left(\frac{5}{3}, 2\right)$

12) K(-5, 7), J(-6, -1), I(6, 7)

A)  $\left(-\frac{5}{3}, \frac{13}{3}\right)$       B)  $\left(-\frac{5}{3}, 4\right)$

C)  $\left(-\frac{5}{3}, \frac{14}{3}\right)$       D)  $\left(-\frac{7}{3}, 4\right)$



13) F(9, 3), G(-7, 3), H(-6, -7)

A)  $\left(-\frac{4}{3}, -\frac{1}{3}\right)$       B)  $\left(-\frac{2}{3}, 0\right)$

C)  $\left(-\frac{4}{3}, -\frac{2}{3}\right)$       D)  $\left(-\frac{5}{3}, -\frac{1}{3}\right)$

14) L(-8, -7), M(0, 6), N(10, -7)

A)  $\left(\frac{2}{3}, -2\right)$       B)  $\left(\frac{2}{3}, -\frac{8}{3}\right)$

C)  $\left(\frac{1}{3}, -2\right)$       D)  $\left(\frac{4}{3}, -\frac{8}{3}\right)$

15) R(8, -6), Q(1, -6), P(5, 6)

A)  $\left(\frac{14}{3}, -\frac{7}{3}\right)$       B)  $\left(\frac{14}{3}, -\frac{8}{3}\right)$

C)  $\left(\frac{14}{3}, -2\right)$       D)  $\left(\frac{13}{3}, -\frac{4}{3}\right)$

16) S(1, 1), T(7, -5), U(-4, -5)

A)  $\left(\frac{2}{3}, -\frac{8}{3}\right)$       B)  $\left(\frac{4}{3}, -3\right)$

C)  $\left(1, -\frac{7}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{8}{3}\right)$

17) V(-7, 2), W(13, 2), X(1, 4)

A)  $\left(\frac{8}{3}, \frac{10}{3}\right)$       B)  $\left(2, \frac{10}{3}\right)$

C) (2, 3)      D)  $\left(\frac{7}{3}, \frac{8}{3}\right)$

18) A(8, -7), B(-7, 0), C(1, -7)

A)  $\left(\frac{1}{3}, -\frac{16}{3}\right)$       B)  $\left(\frac{2}{3}, -\frac{14}{3}\right)$

C)  $\left(\frac{1}{3}, -\frac{14}{3}\right)$       D) (1, -5)

19) J(8, -8), I(5, 9), H(-4, -8)

A)  $\left(\frac{8}{3}, -3\right)$       B)  $\left(\frac{7}{3}, -\frac{7}{3}\right)$

C)  $\left(3, -\frac{7}{3}\right)$       D)  $\left(\frac{10}{3}, -\frac{7}{3}\right)$

20) E(-2, -6), F(6, -6), G(1, 2)

A)  $\left(\frac{5}{3}, -\frac{10}{3}\right)$       B)  $\left(\frac{4}{3}, -4\right)$

C)  $\left(2, -\frac{8}{3}\right)$       D)  $\left(\frac{4}{3}, -\frac{10}{3}\right)$

21) K(-7, 4), L(2, -7), M(10, -7)

A)  $\left(\frac{5}{3}, -\frac{10}{3}\right)$       B)  $\left(\frac{7}{3}, -\frac{10}{3}\right)$

C)  $\left(\frac{7}{3}, -3\right)$       D)  $\left(\frac{7}{3}, -4\right)$

22) C(-3, -8), B(13, -5), A(-7, -5)

A) (1, -6)      B)  $\left(\frac{1}{3}, -\frac{20}{3}\right)$

C)  $\left(1, -\frac{17}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{17}{3}\right)$

23) U(7, -5), V(-7, -5), W(0, 4)

A) (0, -2)      B)  $\left(-\frac{1}{3}, -\frac{8}{3}\right)$

C)  $\left(\frac{1}{3}, -\frac{5}{3}\right)$       D)  $\left(\frac{2}{3}, -2\right)$

24) T(-7, -8), S(-2, 6), R(5, -8)

A) (-1, -3)      B)  $\left(-1, -\frac{8}{3}\right)$

C)  $\left(-\frac{4}{3}, -\frac{10}{3}\right)$       D)  $\left(-1, -\frac{10}{3}\right)$





## Answers to Assignment (ID: 3)

1) D  
5) B  
9) A  
13) A  
17) D  
21) A

2) A  
6) B  
10) B  
14) B  
18) B  
22) A

3) A  
7) D  
11) C  
15) C  
19) C  
23) A

4) A  
8) C  
12) A  
16) B  
20) A  
24) C



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) I(-7, 0), H(8, -4), G(1, 0)

A)  $\left(\frac{2}{3}, -\frac{4}{3}\right)$       B)  $\left(1, -\frac{2}{3}\right)$

C)  $\left(1, -\frac{4}{3}\right)$       D)  $\left(\frac{4}{3}, -\frac{5}{3}\right)$

2) C(5, 1), D(3, -4), E(-7, 1)

A)  $\left(\frac{2}{3}, -\frac{4}{3}\right)$       B)  $\left(\frac{1}{3}, -\frac{2}{3}\right)$

C)  $\left(\frac{2}{3}, -1\right)$       D)  $\left(\frac{2}{3}, -\frac{2}{3}\right)$

3) Z(8, -2), Y(-7, 3), X(-1, 3)

A)  $\left(-\frac{2}{3}, \frac{5}{3}\right)$       B)  $\left(\frac{2}{3}, 2\right)$

C)  $\left(-\frac{2}{3}, \frac{2}{3}\right)$       D)  $\left(0, \frac{4}{3}\right)$

4) J(0, -7), K(-4, 11), L(3, 11)

A)  $\left(-1, \frac{17}{3}\right)$       B)  $\left(-\frac{1}{3}, 5\right)$

C)  $\left(-\frac{2}{3}, \frac{16}{3}\right)$       D)  $\left(\frac{1}{3}, \frac{16}{3}\right)$

5) G(11, -7), H(-3, 2), I(-7, -7)

A)  $\left(\frac{1}{3}, -4\right)$       B)  $\left(1, -\frac{11}{3}\right)$

C) (1, -4)      D)  $\left(0, -\frac{14}{3}\right)$

6) S(-4, -7), R(4, 4), Q(0, -7)

A)  $\left(0, -\frac{10}{3}\right)$       B)  $\left(-\frac{1}{3}, -3\right)$

C)  $\left(0, -\frac{11}{3}\right)$       D)  $\left(-\frac{2}{3}, -\frac{10}{3}\right)$

7) T(-7, 7), U(11, 7), V(1, -7)

A) (1, 2)      B)  $\left(\frac{7}{3}, 2\right)$

C)  $\left(2, \frac{5}{3}\right)$       D)  $\left(\frac{5}{3}, \frac{7}{3}\right)$

8) B(-7, -4), C(1, -1), D(9, -4)

A) (1, -3)      B)  $\left(\frac{4}{3}, -\frac{7}{3}\right)$

C)  $\left(1, -\frac{10}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{8}{3}\right)$

9) W(6, 3), X(-7, 3), Y(-1, -8)

A)  $\left(-\frac{2}{3}, -\frac{2}{3}\right)$       B)  $\left(0, -\frac{1}{3}\right)$

C)  $\left(0, -\frac{2}{3}\right)$       D)  $\left(-1, -\frac{4}{3}\right)$

10) H(-7, -7), G(12, -7), F(5, 2)

A)  $\left(3, -\frac{13}{3}\right)$       B)  $\left(\frac{10}{3}, -4\right)$

C)  $\left(\frac{8}{3}, -\frac{13}{3}\right)$       D)  $\left(\frac{11}{3}, -\frac{10}{3}\right)$

11) K(3, 1), J(9, -3), I(-7, -3)

A)  $\left(1, -\frac{7}{3}\right)$       B)  $\left(\frac{5}{3}, -\frac{5}{3}\right)$

C)  $\left(\frac{4}{3}, -1\right)$       D)  $\left(\frac{7}{3}, -\frac{7}{3}\right)$

12) L(-7, -4), M(-1, -4), N(4, 1)

A)  $\left(-\frac{4}{3}, -\frac{7}{3}\right)$       B)  $\left(-\frac{4}{3}, -3\right)$

C)  $\left(-\frac{5}{3}, -\frac{5}{3}\right)$       D)  $\left(-2, -\frac{7}{3}\right)$



13) K(-4, 9), L(1, -7), M(7, -7)

A)  $\left(\frac{4}{3}, -\frac{5}{3}\right)$       B)  $\left(2, -\frac{7}{3}\right)$

C)  $\left(\frac{4}{3}, -\frac{4}{3}\right)$       D) (1, -2)

14) V(8, -5), W(-8, -3), X(9, -3)

A)  $\left(3, -\frac{11}{3}\right)$       B)  $\left(\frac{10}{3}, -3\right)$

C)  $\left(\frac{7}{3}, -\frac{11}{3}\right)$       D)  $\left(\frac{8}{3}, -\frac{11}{3}\right)$

15) A(11, 8), B(-7, 8), C(-2, -7)

A)  $\left(\frac{4}{3}, \frac{8}{3}\right)$       B)  $\left(1, \frac{11}{3}\right)$

C)  $\left(\frac{2}{3}, \frac{10}{3}\right)$       D)  $\left(\frac{2}{3}, 3\right)$

16) S(-6, 6), T(-7, -1), U(13, -1)

A)  $\left(-\frac{2}{3}, \frac{2}{3}\right)$       B)  $\left(-\frac{1}{3}, \frac{2}{3}\right)$

C)  $\left(\frac{1}{3}, \frac{2}{3}\right)$       D)  $\left(0, \frac{4}{3}\right)$

17) D(7, 2), E(8, 6), F(-8, 2)

A)  $\left(\frac{5}{3}, \frac{10}{3}\right)$       B)  $\left(\frac{7}{3}, \frac{10}{3}\right)$

C)  $\left(\frac{8}{3}, \frac{10}{3}\right)$       D)  $\left(\frac{8}{3}, 3\right)$

18) J(-7, -7), I(13, -7), H(0, 2)

A)  $\left(2, -\frac{13}{3}\right)$       B) (2, -4)

C)  $\left(\frac{7}{3}, -\frac{10}{3}\right)$       D)  $\left(\frac{7}{3}, -4\right)$

19) K(7, -6), L(-6, -6), M(5, 7)

A)  $\left(\frac{7}{3}, -\frac{5}{3}\right)$       B) (2, -1)

C) (2, -2)      D)  $\left(2, -\frac{5}{3}\right)$

20) K(0, -4), J(8, -4), I(-5, 4)

A)  $\left(\frac{5}{3}, -2\right)$       B)  $\left(\frac{5}{3}, -\frac{4}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{5}{3}\right)$       D)  $\left(1, -\frac{4}{3}\right)$

21) R(-7, -1), S(-6, -7), T(6, -7)

A)  $\left(-\frac{5}{3}, -\frac{17}{3}\right)$       B)  $\left(-\frac{7}{3}, -\frac{14}{3}\right)$

C)  $\left(-\frac{7}{3}, -5\right)$       D)  $\left(-2, -\frac{17}{3}\right)$

22) U(2, 5), V(-7, 5), W(8, -1)

A)  $\left(\frac{5}{3}, \frac{10}{3}\right)$       B)  $\left(\frac{1}{3}, 3\right)$

C) (1, 3)      D)  $\left(\frac{2}{3}, \frac{8}{3}\right)$

23) Z(-4, -2), Y(-7, -2), X(-5, 3)

A)  $\left(-6, \frac{1}{3}\right)$       B)  $\left(-5, -\frac{1}{3}\right)$

C)  $\left(-\frac{16}{3}, 0\right)$       D)  $\left(-\frac{16}{3}, -\frac{1}{3}\right)$

24) C(-7, 6), D(10, 8), E(12, 6)

A)  $\left(\frac{16}{3}, \frac{19}{3}\right)$       B)  $\left(\frac{16}{3}, \frac{22}{3}\right)$

C)  $\left(\frac{13}{3}, 6\right)$       D)  $\left(5, \frac{20}{3}\right)$



## Answers to Assignment (ID: 4)

1) A  
5) A  
9) A  
13) A  
17) B  
21) C

2) B  
6) A  
10) B  
14) A  
18) B  
22) C

3) D  
7) D  
11) B  
15) D  
19) D  
23) D

4) B  
8) A  
12) A  
16) D  
20) D  
24) D



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) J(-2, 2), K(10, 2), L(-7, -3)

A)  $\left(1, \frac{1}{3}\right)$       B)  $\left(\frac{1}{3}, 1\right)$

C)  $\left(\frac{1}{3}, \frac{1}{3}\right)$       D)  $\left(\frac{2}{3}, 1\right)$

2) P(13, 6), Q(-7, 6), R(0, -4)

A)  $\left(\frac{8}{3}, \frac{7}{3}\right)$       B)  $\left(2, \frac{8}{3}\right)$

C)  $\left(\frac{5}{3}, \frac{10}{3}\right)$       D)  $\left(\frac{7}{3}, \frac{10}{3}\right)$

3) I(-2, -6), H(-3, -7), G(4, -7)

A) (0, -7)      B) (-1, -7)

C)  $\left(\frac{1}{3}, -\frac{22}{3}\right)$       D)  $\left(-\frac{1}{3}, -\frac{20}{3}\right)$

4) P(-1, 7), Q(-5, -5), R(1, -5)

A)  $\left(-\frac{5}{3}, -\frac{2}{3}\right)$       B)  $\left(-\frac{4}{3}, -1\right)$

C)  $\left(-\frac{5}{3}, -1\right)$       D)  $\left(-\frac{7}{3}, -\frac{4}{3}\right)$

5) T(-4, -4), U(-4, -6), V(2, -6)

A)  $\left(-\frac{7}{3}, -6\right)$       B)  $\left(-2, -\frac{16}{3}\right)$

C)  $\left(-\frac{5}{3}, -\frac{17}{3}\right)$       D)  $\left(-\frac{8}{3}, -5\right)$

6) B(0, -7), C(-1, -8), D(-7, -8)

A) (-3, -8)      B)  $\left(-\frac{8}{3}, -\frac{23}{3}\right)$

C)  $\left(-3, -\frac{25}{3}\right)$       D)  $\left(-\frac{8}{3}, -7\right)$

7) I(2, -4), J(-7, -4), K(-6, 8)

A)  $\left(-\frac{11}{3}, 0\right)$       B)  $\left(-\frac{13}{3}, \frac{1}{3}\right)$

C)  $\left(-3, -\frac{1}{3}\right)$       D)  $\left(-3, -\frac{2}{3}\right)$

8) Y(5, -1), X(6, -8), W(-3, -8)

A)  $\left(\frac{7}{3}, -5\right)$       B)  $\left(\frac{10}{3}, -\frac{16}{3}\right)$

C)  $\left(3, -\frac{17}{3}\right)$       D)  $\left(\frac{8}{3}, -\frac{17}{3}\right)$

9) E(-4, 8), F(2, 8), G(-2, 0)

A)  $\left(-\frac{5}{3}, 5\right)$       B)  $\left(-\frac{2}{3}, 5\right)$

C)  $\left(-\frac{5}{3}, \frac{17}{3}\right)$       D)  $\left(-\frac{4}{3}, \frac{16}{3}\right)$

10) L(7, -8), M(6, 9), N(-2, -8)

A)  $\left(\frac{11}{3}, -3\right)$       B)  $\left(\frac{11}{3}, -\frac{7}{3}\right)$

C)  $\left(\frac{10}{3}, -\frac{8}{3}\right)$       D)  $\left(\frac{13}{3}, -\frac{8}{3}\right)$

11) L(-6, -5), M(1, -5), N(7, -1)

A) (1, -4)      B)  $\left(\frac{2}{3}, -\frac{11}{3}\right)$

C)  $\left(\frac{4}{3}, -\frac{13}{3}\right)$       D)  $\left(\frac{2}{3}, -\frac{13}{3}\right)$

12) S(6, 1), T(1, 6), U(-8, 1)

A)  $\left(-\frac{2}{3}, 3\right)$       B)  $\left(-\frac{1}{3}, \frac{8}{3}\right)$

C)  $\left(-\frac{1}{3}, \frac{10}{3}\right)$       D)  $\left(-\frac{2}{3}, \frac{7}{3}\right)$



13) X(-7, 6), W(13, 6), V(-1, -6)

A)  $\left(\frac{7}{3}, \frac{7}{3}\right)$       B)  $\left(\frac{5}{3}, \frac{4}{3}\right)$

C)  $\left(2, \frac{8}{3}\right)$       D)  $\left(\frac{5}{3}, 2\right)$

15) D(1, 7), E(2, 0), F(-7, 7)

A)  $\left(-\frac{4}{3}, \frac{14}{3}\right)$       B)  $\left(-\frac{2}{3}, \frac{13}{3}\right)$

C) (-1, 5)      D)  $\left(-\frac{4}{3}, \frac{16}{3}\right)$

17) J(8, -1), I(3, 7), H(-7, -1)

A)  $\left(\frac{4}{3}, \frac{5}{3}\right)$       B) (2, 2)

C)  $\left(\frac{4}{3}, 2\right)$       D)  $\left(\frac{2}{3}, \frac{7}{3}\right)$

19) Q(-3, -7), R(6, 5), S(-6, -7)

A)  $\left(-\frac{2}{3}, -\frac{8}{3}\right)$       B)  $\left(-1, -\frac{10}{3}\right)$

C)  $\left(-\frac{2}{3}, -\frac{7}{3}\right)$       D) (-1, -3)

21) Z(-5, -7), Y(0, -7), X(-1, 7)

A)  $\left(-2, -\frac{7}{3}\right)$       B) (-2, -2)

C)  $\left(-\frac{5}{3}, -2\right)$       D)  $\left(-\frac{4}{3}, -\frac{7}{3}\right)$

23) F(6, -1), G(-7, 5), H(7, 5)

A)  $\left(\frac{4}{3}, 3\right)$       B) (2, 3)

C)  $\left(\frac{4}{3}, \frac{10}{3}\right)$       D)  $\left(\frac{5}{3}, \frac{10}{3}\right)$

14) C(-6, 2), B(5, -8), A(-7, -8)

A)  $\left(-\frac{8}{3}, -\frac{14}{3}\right)$       B)  $\left(-2, -\frac{16}{3}\right)$

C)  $\left(-2, -\frac{13}{3}\right)$       D)  $\left(-\frac{7}{3}, -5\right)$

16) K(7, -4), L(2, 1), M(-4, 1)

A) (1, -1)      B)  $\left(\frac{7}{3}, -\frac{1}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{2}{3}\right)$       D)  $\left(\frac{7}{3}, 0\right)$

18) T(-8, 7), S(12, 7), R(3, 5)

A)  $\left(\frac{7}{3}, \frac{19}{3}\right)$       B)  $\left(2, \frac{17}{3}\right)$

C)  $\left(\frac{5}{3}, \frac{19}{3}\right)$       D)  $\left(2, \frac{19}{3}\right)$

20) U(11, 1), V(-7, -6), W(3, -6)

A)  $\left(3, -\frac{13}{3}\right)$       B)  $\left(\frac{7}{3}, -\frac{11}{3}\right)$

C)  $\left(\frac{5}{3}, -3\right)$       D)  $\left(\frac{7}{3}, -\frac{10}{3}\right)$

22) C(11, -2), D(-7, -2), E(2, 4)

A)  $\left(\frac{8}{3}, \frac{1}{3}\right)$       B)  $\left(2, \frac{2}{3}\right)$

C) (2, 0)      D)  $\left(\frac{4}{3}, -\frac{2}{3}\right)$

24) J(-7, -4), K(7, -4), L(-8, 3)

A)  $\left(-\frac{8}{3}, -1\right)$       B)  $\left(-\frac{8}{3}, -\frac{5}{3}\right)$

C)  $\left(-\frac{10}{3}, -\frac{4}{3}\right)$       D)  $\left(-\frac{10}{3}, -2\right)$



## Answers to Assignment (ID: 5)

1) C  
5) B  
9) D  
13) D  
17) A  
21) A

2) B  
6) B  
10) B  
14) A  
18) A  
22) C

3) D  
7) A  
11) B  
15) A  
19) D  
23) B

4) C  
8) D  
12) B  
16) C  
20) B  
24) B



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) R(-7, 4), Q(10, -5), P(-1, -5)

A)  $\left(\frac{4}{3}, -\frac{8}{3}\right)$       B)  $\left(\frac{4}{3}, -\frac{7}{3}\right)$

C)  $\left(1, -\frac{8}{3}\right)$       D)  $\left(\frac{2}{3}, -2\right)$

2) A(-7, -2), B(-3, -6), C(12, -6)

A)  $\left(\frac{4}{3}, -5\right)$       B)  $\left(0, -\frac{16}{3}\right)$

C)  $\left(0, -\frac{14}{3}\right)$       D)  $\left(\frac{2}{3}, -\frac{14}{3}\right)$

3) T(10, 0), U(-7, -3), V(8, -3)

A)  $\left(\frac{13}{3}, -\frac{8}{3}\right)$       B)  $\left(\frac{11}{3}, -\frac{8}{3}\right)$

C)  $\left(\frac{11}{3}, -2\right)$       D)  $\left(\frac{11}{3}, -\frac{4}{3}\right)$

4) Y(-5, 5), X(8, -7), W(-3, -7)

A)  $\left(\frac{1}{3}, -3\right)$       B)  $\left(-\frac{2}{3}, -\frac{8}{3}\right)$

C)  $\left(\frac{2}{3}, -3\right)$       D) (0, -3)

5) E(-6, 4), F(5, -8), G(-8, -8)

A)  $\left(-\frac{11}{3}, -\frac{11}{3}\right)$

B)  $\left(-\frac{8}{3}, -\frac{10}{3}\right)$

C) (-3, -4)

D)  $\left(-\frac{11}{3}, -\frac{13}{3}\right)$

6) B(-7, -5), C(7, 2), D(-7, 2)

A) (-2, -1)      B)  $\left(-\frac{7}{3}, -\frac{1}{3}\right)$

C) (-3, 0)      D)  $\left(-\frac{8}{3}, -\frac{1}{3}\right)$

7) I(-2, 1), J(8, -7), K(-7, -7)

A)  $\left(-1, -\frac{13}{3}\right)$       B)  $\left(-\frac{1}{3}, -\frac{13}{3}\right)$

C)  $\left(-\frac{2}{3}, -5\right)$       D)  $\left(0, -\frac{14}{3}\right)$

8) L(4, -8), M(-4, -8), N(0, -1)

A)  $\left(\frac{2}{3}, -6\right)$       B)  $\left(\frac{2}{3}, -\frac{16}{3}\right)$

C)  $\left(\frac{1}{3}, -\frac{19}{3}\right)$       D)  $\left(0, -\frac{17}{3}\right)$

9) U(-1, 4), V(-8, 7), W(10, 7)

A)  $\left(0, \frac{19}{3}\right)$       B)  $\left(0, \frac{17}{3}\right)$

C)  $\left(\frac{1}{3}, \frac{16}{3}\right)$       D)  $\left(\frac{1}{3}, 6\right)$

10) R(-1, -8), S(8, 2), T(-8, -8)

A) (-1, -5)      B)  $\left(-\frac{1}{3}, -\frac{14}{3}\right)$

C)  $\left(-\frac{1}{3}, -4\right)$       D)  $\left(-\frac{1}{3}, -\frac{16}{3}\right)$

11) V(-2, -6), W(-6, 7), X(7, 7)

A)  $\left(\frac{1}{3}, 2\right)$       B)  $\left(\frac{1}{3}, \frac{7}{3}\right)$

C)  $\left(-\frac{1}{3}, \frac{8}{3}\right)$       D)  $\left(-\frac{1}{3}, 2\right)$

12) D(8, 9), E(-3, -7), F(7, -7)

A)  $\left(\frac{10}{3}, -\frac{7}{3}\right)$       B)  $\left(\frac{10}{3}, -2\right)$

C)  $\left(\frac{13}{3}, -\frac{5}{3}\right)$       D)  $\left(4, -\frac{5}{3}\right)$





13) I(-8, 7), H(7, -5), G(2, -5)

A)  $\left(\frac{2}{3}, -\frac{5}{3}\right)$       B)  $\left(\frac{1}{3}, -1\right)$

C)  $\left(\frac{1}{3}, -\frac{2}{3}\right)$       D)  $\left(0, -\frac{5}{3}\right)$

15) A(5, 4), B(-7, -6), C(10, 4)

A)  $\left(\frac{10}{3}, \frac{2}{3}\right)$       B) (2, 0)

C)  $\left(\frac{8}{3}, \frac{2}{3}\right)$       D)  $\left(\frac{10}{3}, \frac{1}{3}\right)$

17) E(6, 2), D(-7, 2), C(5, -5)

A) (2, -1)      B)  $\left(\frac{4}{3}, -\frac{1}{3}\right)$

C)  $\left(1, -\frac{2}{3}\right)$       D) (1, 0)

19) X(-1, -7), Y(6, -3), Z(2, -3)

A) (3, -5)      B)  $\left(3, -\frac{13}{3}\right)$

C)  $\left(\frac{7}{3}, -\frac{13}{3}\right)$       D) (3, -4)

21) C(-8, 5), D(-6, 2), E(12, 5)

A)  $\left(0, \frac{13}{3}\right)$       B)  $\left(-1, \frac{14}{3}\right)$

C)  $\left(-\frac{2}{3}, 4\right)$       D)  $\left(-\frac{4}{3}, \frac{11}{3}\right)$

23) J(-7, -6), K(4, 8), L(10, -6)

A)  $\left(2, -\frac{2}{3}\right)$       B)  $\left(\frac{5}{3}, -1\right)$

C)  $\left(\frac{7}{3}, -\frac{4}{3}\right)$       D)  $\left(\frac{7}{3}, -\frac{5}{3}\right)$

14) K(7, 4), L(7, -8), M(-4, -8)

A)  $\left(\frac{8}{3}, -\frac{10}{3}\right)$       B)  $\left(\frac{10}{3}, -\frac{14}{3}\right)$

C)  $\left(\frac{10}{3}, -\frac{11}{3}\right)$       D)  $\left(\frac{10}{3}, -4\right)$

16) Q(-6, -7), R(-7, 4), S(9, -7)

A)  $\left(-1, -\frac{11}{3}\right)$       B)  $\left(-\frac{5}{3}, -4\right)$

C)  $\left(-\frac{5}{3}, -\frac{11}{3}\right)$       D)  $\left(-\frac{4}{3}, -\frac{10}{3}\right)$

18) T(11, -8), U(-1, 4), V(-7, -8)

A) (1, -4)      B)  $\left(\frac{4}{3}, -4\right)$

C)  $\left(\frac{4}{3}, -\frac{13}{3}\right)$       D)  $\left(\frac{1}{3}, -\frac{10}{3}\right)$

20) H(5, -7), G(-8, -3), F(9, -3)

A)  $\left(\frac{8}{3}, -\frac{14}{3}\right)$       B)  $\left(\frac{4}{3}, -4\right)$

C)  $\left(2, -\frac{13}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{11}{3}\right)$

22) J(13, -8), K(13, -6), L(-7, -8)

A)  $\left(7, -\frac{20}{3}\right)$       B)  $\left(\frac{19}{3}, -\frac{22}{3}\right)$

C)  $\left(\frac{20}{3}, -\frac{23}{3}\right)$       D)  $\left(\frac{17}{3}, -\frac{22}{3}\right)$

24) R(-8, -7), Q(8, -5), P(-7, -5)

A)  $\left(-\frac{8}{3}, -6\right)$       B)  $\left(-\frac{8}{3}, -\frac{16}{3}\right)$

C)  $\left(-\frac{7}{3}, -\frac{17}{3}\right)$       D)  $\left(-\frac{5}{3}, -6\right)$



## Answers to Assignment (ID: 6)

1) D  
5) C  
9) D  
13) B  
17) B  
21) C

2) D  
6) B  
10) B  
14) D  
18) A  
22) B

3) C  
7) B  
11) C  
15) C  
19) C  
23) C

4) D  
8) D  
12) D  
16) D  
20) C  
24) C



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) S(-7, 0), T(10, 0), U(6, 3)

- A) (3, 1)      B)  $\left(3, \frac{1}{3}\right)$   
 C)  $\left(\frac{10}{3}, \frac{5}{3}\right)$       D)  $\left(\frac{8}{3}, \frac{2}{3}\right)$

2) W(3, 4), X(-1, -7), Y(1, -7)

- A)  $\left(1, -\frac{8}{3}\right)$       B)  $\left(1, -\frac{10}{3}\right)$   
 C)  $\left(\frac{2}{3}, -3\right)$       D)  $\left(\frac{1}{3}, -\frac{8}{3}\right)$

3) B(0, -3), C(-5, 2), D(-7, -3)

- A)  $\left(-\frac{11}{3}, -\frac{2}{3}\right)$       B)  $\left(-\frac{10}{3}, -1\right)$   
 C)  $\left(-4, -\frac{2}{3}\right)$       D)  $\left(-4, -\frac{4}{3}\right)$

4) G(5, -3), F(4, -1), E(-5, -3)

- A)  $\left(\frac{2}{3}, -\frac{5}{3}\right)$       B)  $\left(\frac{4}{3}, -\frac{7}{3}\right)$   
 C)  $\left(2, -\frac{8}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{7}{3}\right)$

5) H(-7, -8), I(1, -8), J(7, 5)

- A)  $\left(\frac{2}{3}, -\frac{13}{3}\right)$       B)  $\left(-\frac{1}{3}, -\frac{10}{3}\right)$   
 C)  $\left(\frac{1}{3}, -\frac{11}{3}\right)$       D)  $\left(\frac{1}{3}, -3\right)$

6) G(6, -7), F(1, -7), E(8, 11)

- A) (5, -1)      B)  $\left(\frac{17}{3}, -\frac{4}{3}\right)$   
 C)  $\left(\frac{14}{3}, -1\right)$       D)  $\left(\frac{17}{3}, -\frac{2}{3}\right)$

7) R(-1, -1), S(11, -7), T(-8, -7)

- A)  $\left(\frac{4}{3}, -5\right)$       B)  $\left(\frac{2}{3}, -5\right)$   
 C)  $\left(1, -\frac{14}{3}\right)$       D) (0, -5)

8) L(8, 7), M(-6, -7), N(8, -7)

- A)  $\left(\frac{8}{3}, -\frac{5}{3}\right)$       B)  $\left(\frac{10}{3}, -\frac{7}{3}\right)$   
 C)  $\left(\frac{10}{3}, -\frac{8}{3}\right)$       D) (4, -3)

9) U(-7, 1), V(-2, -3), W(13, -3)

- A)  $\left(\frac{4}{3}, -\frac{4}{3}\right)$       B)  $\left(\frac{4}{3}, -\frac{5}{3}\right)$   
 C)  $\left(\frac{5}{3}, -\frac{5}{3}\right)$       D)  $\left(\frac{2}{3}, -\frac{5}{3}\right)$

10) A(-5, -8), B(5, -8), C(-6, 1)

- A)  $\left(-\frac{4}{3}, -5\right)$       B)  $\left(-\frac{7}{3}, -\frac{14}{3}\right)$   
 C) (-2, -5)      D)  $\left(-2, -\frac{14}{3}\right)$

11) K(0, 4), L(13, -3), M(-7, -3)

- A)  $\left(\frac{4}{3}, 0\right)$       B)  $\left(\frac{8}{3}, -\frac{2}{3}\right)$   
 C)  $\left(\frac{7}{3}, -\frac{2}{3}\right)$       D)  $\left(2, -\frac{2}{3}\right)$

12) I(0, -3), H(-5, -3), G(-5, 6)

- A)  $\left(-3, \frac{1}{3}\right)$       B)  $\left(-\frac{10}{3}, 0\right)$   
 C)  $\left(-\frac{10}{3}, -\frac{1}{3}\right)$       D)  $\left(-\frac{11}{3}, -\frac{2}{3}\right)$



13) D(-5, -7), E(5, -7), F(7, -1)

A)  $\left(\frac{8}{3}, -5\right)$       B)  $\left(\frac{7}{3}, -\frac{17}{3}\right)$

C)  $\left(\frac{7}{3}, -\frac{16}{3}\right)$       D)  $\left(\frac{7}{3}, -5\right)$

14) N(-2, -6), M(5, -6), L(4, -1)

A)  $\left(\frac{7}{3}, -\frac{13}{3}\right)$       B)  $\left(\frac{8}{3}, -4\right)$

C)  $\left(\frac{8}{3}, -5\right)$       D)  $\left(\frac{7}{3}, -\frac{11}{3}\right)$

15) Q(10, -4), R(-7, 3), S(7, 3)

A)  $\left(\frac{10}{3}, \frac{2}{3}\right)$       B) (4, 0)

C)  $\left(\frac{11}{3}, 1\right)$       D)  $\left(\frac{8}{3}, 0\right)$

16) T(-7, -4), U(8, -4), V(7, 7)

A)  $\left(\frac{8}{3}, 0\right)$       B)  $\left(\frac{8}{3}, -\frac{1}{3}\right)$

C)  $\left(\frac{7}{3}, -1\right)$       D)  $\left(\frac{8}{3}, -1\right)$

17) X(-8, -2), Y(7, -2), Z(6, 7)

A)  $\left(\frac{4}{3}, \frac{4}{3}\right)$       B)  $\left(\frac{5}{3}, \frac{4}{3}\right)$

C)  $\left(2, \frac{1}{3}\right)$       D)  $\left(\frac{5}{3}, 1\right)$

18) C(3, 8), D(-5, -8), E(6, -8)

A)  $\left(\frac{4}{3}, -2\right)$       B)  $\left(2, -\frac{10}{3}\right)$

C)  $\left(\frac{2}{3}, -2\right)$       D)  $\left(\frac{4}{3}, -\frac{8}{3}\right)$

19) H(7, 6), G(-7, 6), F(0, -4)

A) (0, 2)      B)  $\left(0, \frac{8}{3}\right)$

C)  $\left(\frac{1}{3}, 2\right)$       D)  $\left(-\frac{1}{3}, 2\right)$

20) K(-7, -5), L(3, 5), M(-7, 5)

A)  $\left(-\frac{10}{3}, 2\right)$       B)  $\left(-\frac{13}{3}, \frac{7}{3}\right)$

C)  $\left(-4, \frac{5}{3}\right)$       D)  $\left(-\frac{11}{3}, \frac{5}{3}\right)$

21) I(-8, 5), J(5, -2), K(3, 5)

A)  $\left(\frac{2}{3}, \frac{7}{3}\right)$       B)  $\left(\frac{1}{3}, \frac{8}{3}\right)$

C)  $\left(-\frac{2}{3}, 3\right)$       D)  $\left(0, \frac{8}{3}\right)$

22) P(-3, -6), Q(3, -6), R(3, 3)

A) (1, -3)      B)  $\left(\frac{4}{3}, -\frac{11}{3}\right)$

C)  $\left(\frac{2}{3}, -\frac{10}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{8}{3}\right)$

23) S(-7, -8), T(1, 7), U(7, -8)

A)  $\left(-\frac{1}{3}, -\frac{8}{3}\right)$       B)  $\left(\frac{1}{3}, -3\right)$

C)  $\left(-\frac{1}{3}, -3\right)$       D)  $\left(0, -\frac{10}{3}\right)$

24) X(-4, -5), W(7, -1), V(7, -5)

A)  $\left(\frac{11}{3}, -\frac{11}{3}\right)$       B)  $\left(\frac{10}{3}, -\frac{11}{3}\right)$

C) (3, -4)      D)  $\left(\frac{8}{3}, -3\right)$



## Answers to Assignment (ID: 7)

- 1) A
- 5) C
- 9) B
- 13) D
- 17) D
- 21) D

- 2) B
- 6) A
- 10) C
- 14) A
- 18) D
- 22) A

- 3) D
- 7) B
- 11) D
- 15) A
- 19) B
- 23) B

- 4) B
- 8) B
- 12) B
- 16) B
- 20) D
- 24) B



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) B(-7, 6), C(-4, 1), D(11, 1)

A)  $\left(-\frac{1}{3}, 2\right)$       B)  $\left(-\frac{2}{3}, \frac{10}{3}\right)$

C)  $\left(0, \frac{10}{3}\right)$       D)  $\left(0, \frac{8}{3}\right)$

2) L(8, 8), M(-8, 8), N(-1, -7)

A) (-1, 3)      B)  $\left(-\frac{1}{3}, \frac{8}{3}\right)$

C)  $\left(-\frac{1}{3}, \frac{7}{3}\right)$       D)  $\left(-\frac{1}{3}, 3\right)$

3) H(10, 6), I(2, -6), J(-7, 6)

A)  $\left(\frac{5}{3}, 2\right)$       B)  $\left(\frac{7}{3}, \frac{4}{3}\right)$

C)  $\left(\frac{4}{3}, \frac{5}{3}\right)$       D)  $\left(\frac{5}{3}, \frac{5}{3}\right)$

4) T(-7, 1), U(12, 1), V(-2, 8)

A) (1, 4)      B)  $\left(\frac{2}{3}, \frac{8}{3}\right)$

C)  $\left(1, \frac{10}{3}\right)$       D)  $\left(\frac{5}{3}, \frac{8}{3}\right)$

5) G(3, -8), F(7, -8), E(-6, 8)

A)  $\left(\frac{4}{3}, -\frac{8}{3}\right)$       B)  $\left(\frac{4}{3}, -\frac{10}{3}\right)$

C)  $\left(\frac{4}{3}, -3\right)$       D)  $\left(\frac{2}{3}, -3\right)$

6) R(-6, -7), S(-7, 5), T(7, -7)

A) (-2, -3)      B)  $\left(-\frac{4}{3}, -\frac{11}{3}\right)$

C)  $\left(-\frac{7}{3}, -\frac{10}{3}\right)$       D)  $\left(-2, -\frac{7}{3}\right)$

7) W(8, -3), V(-8, -3), U(-1, 1)

A)  $\left(-\frac{2}{3}, -1\right)$       B)  $\left(-\frac{1}{3}, -\frac{5}{3}\right)$

C)  $\left(-\frac{1}{3}, -1\right)$       D)  $\left(0, -\frac{4}{3}\right)$

8) A(8, -8), B(2, -8), C(-7, 4)

A) (1, -4)      B)  $\left(\frac{5}{3}, -\frac{10}{3}\right)$

C)  $\left(\frac{4}{3}, -\frac{10}{3}\right)$       D)  $\left(1, -\frac{10}{3}\right)$

9) D(-7, -4), E(2, -4), F(8, -7)

A) (1, -5)      B)  $\left(\frac{2}{3}, -\frac{14}{3}\right)$

C)  $\left(1, -\frac{13}{3}\right)$       D)  $\left(1, -\frac{16}{3}\right)$

10) J(11, -6), K(-7, -6), L(3, 8)

A)  $\left(\frac{7}{3}, -2\right)$       B)  $\left(\frac{7}{3}, -\frac{4}{3}\right)$

C)  $\left(3, -\frac{4}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{2}{3}\right)$

11) G(12, -6), H(-1, 7), I(-7, -6)

A)  $\left(\frac{5}{3}, -1\right)$       B)  $\left(2, -\frac{5}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{5}{3}\right)$       D)  $\left(\frac{4}{3}, -\frac{5}{3}\right)$

12) U(4, -6), V(-2, 8), W(-3, -6)

A)  $\left(-\frac{1}{3}, -\frac{4}{3}\right)$       B)  $\left(-1, -\frac{4}{3}\right)$

C)  $\left(\frac{1}{3}, -1\right)$       D)  $\left(-1, -\frac{2}{3}\right)$



13) Q(-5, 6), R(-3, -1), S(3, 6)

A)  $\left(-\frac{5}{3}, \frac{11}{3}\right)$       B)  $\left(-\frac{7}{3}, \frac{11}{3}\right)$

C)  $\left(-1, \frac{10}{3}\right)$       D)  $\left(-\frac{4}{3}, \frac{11}{3}\right)$

15) Y(7, -5), X(-5, 1), W(3, -5)

A)  $\left(\frac{5}{3}, -3\right)$       B)  $\left(\frac{7}{3}, -\frac{10}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{10}{3}\right)$       D)  $\left(2, -\frac{10}{3}\right)$

17) C(3, 9), D(-7, -8), E(3, -8)

A)  $\left(\frac{1}{3}, -3\right)$       B)  $\left(-\frac{1}{3}, -\frac{7}{3}\right)$

C)  $\left(-1, -\frac{5}{3}\right)$       D)  $\left(-\frac{2}{3}, -\frac{7}{3}\right)$

19) T(2, -3), U(0, 6), V(7, 6)

A)  $\left(\frac{10}{3}, \frac{8}{3}\right)$       B)  $\left(\frac{11}{3}, \frac{8}{3}\right)$

C)  $\left(\frac{7}{3}, \frac{11}{3}\right)$       D) (3, 3)

21) X(-7, 10), W(-2, -7), V(9, 10)

A)  $\left(-\frac{1}{3}, 5\right)$       B)  $\left(0, \frac{13}{3}\right)$

C)  $\left(0, \frac{14}{3}\right)$       D) (0, 4)

23) B(2, 8), C(9, -8), D(-8, -8)

A)  $\left(\frac{2}{3}, -\frac{7}{3}\right)$       B)  $\left(\frac{1}{3}, -2\right)$

C)  $\left(1, -\frac{8}{3}\right)$       D)  $\left(\frac{5}{3}, -3\right)$

14) V(-7, -7), U(12, -7), T(6, 1)

A) (3, -4)      B)  $\left(\frac{10}{3}, -4\right)$

C)  $\left(4, -\frac{13}{3}\right)$       D)  $\left(\frac{11}{3}, -\frac{13}{3}\right)$

16) H(-3, 4), G(7, -8), F(-5, -8)

A)  $\left(-\frac{1}{3}, -4\right)$       B)  $\left(-1, -\frac{13}{3}\right)$

C)  $\left(-\frac{2}{3}, -\frac{14}{3}\right)$       D)  $\left(-\frac{2}{3}, -4\right)$

18) I(5, -5), J(3, 2), K(-2, -5)

A)  $\left(\frac{4}{3}, -\frac{10}{3}\right)$       B)  $\left(2, -\frac{8}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{8}{3}\right)$       D)  $\left(\frac{8}{3}, -3\right)$

20) S(6, 8), T(2, -5), U(4, 8)

A)  $\left(\frac{13}{3}, 3\right)$       B)  $\left(\frac{11}{3}, \frac{13}{3}\right)$

C)  $\left(4, \frac{11}{3}\right)$       D)  $\left(\frac{14}{3}, 3\right)$

22) P(10, -6), Q(9, 3), R(-8, -6)

A)  $\left(\frac{11}{3}, -3\right)$       B)  $\left(4, -\frac{11}{3}\right)$

C)  $\left(\frac{13}{3}, -\frac{7}{3}\right)$       D)  $\left(3, -\frac{7}{3}\right)$

24) E(-7, -4), F(8, 7), G(-4, 7)

A)  $\left(-\frac{4}{3}, \frac{8}{3}\right)$       B)  $\left(-1, \frac{10}{3}\right)$

C)  $\left(-\frac{5}{3}, 3\right)$       D)  $\left(-\frac{2}{3}, 4\right)$



## Answers to Assignment (ID: 8)

1) D  
5) A  
9) A  
13) A  
17) B  
21) B

2) D  
6) A  
10) B  
14) D  
18) B  
22) A

3) A  
7) B  
11) D  
15) A  
19) D  
23) C

4) C  
8) A  
12) A  
16) A  
20) C  
24) B





## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) K(4, -8), L(-2, 0), M(-3, -8)

A)  $\left(-1, -\frac{16}{3}\right)$       B) (0, -5)

C) (-1, -5)      D)  $\left(-\frac{1}{3}, -\frac{16}{3}\right)$

2) H(9, 4), I(-7, 6), J(8, 6)

A)  $\left(\frac{10}{3}, \frac{17}{3}\right)$       B)  $\left(\frac{10}{3}, \frac{16}{3}\right)$

C) (4, 6)      D)  $\left(\frac{11}{3}, 6\right)$

3) H(8, 3), I(-7, 6), J(-3, 3)

A)  $\left(0, \frac{13}{3}\right)$       B)  $\left(-\frac{2}{3}, 4\right)$

C)  $\left(-\frac{4}{3}, \frac{13}{3}\right)$       D)  $\left(-\frac{4}{3}, 4\right)$

4) W(4, -8), V(10, 7), U(-7, 7)

A)  $\left(\frac{7}{3}, 2\right)$       B)  $\left(2, \frac{5}{3}\right)$

C)  $\left(\frac{5}{3}, 2\right)$       D)  $\left(\frac{5}{3}, \frac{4}{3}\right)$

5) X(-5, 6), Y(4, -8), Z(-1, -8)

A)  $\left(-\frac{4}{3}, -4\right)$       B)  $\left(-\frac{2}{3}, -\frac{10}{3}\right)$

C) (-1, -3)      D)  $\left(-\frac{4}{3}, -\frac{11}{3}\right)$

6) D(-7, 6), E(-4, 1), F(3, 1)

A)  $\left(-\frac{10}{3}, 3\right)$       B)  $\left(-\frac{7}{3}, \frac{7}{3}\right)$

C)  $\left(-2, \frac{7}{3}\right)$       D)  $\left(-\frac{8}{3}, \frac{8}{3}\right)$

7) R(-5, 7), S(3, 3), T(7, 7)

A)  $\left(\frac{5}{3}, 6\right)$       B)  $\left(\frac{4}{3}, \frac{16}{3}\right)$

C)  $\left(\frac{5}{3}, \frac{17}{3}\right)$       D)  $\left(2, \frac{16}{3}\right)$

8) G(4, 7), H(-6, 7), I(0, 0)

A)  $\left(-\frac{2}{3}, \frac{13}{3}\right)$       B)  $\left(-1, \frac{14}{3}\right)$

C)  $\left(-\frac{4}{3}, 5\right)$       D)  $\left(-\frac{2}{3}, \frac{14}{3}\right)$

9) J(6, 7), K(-3, 1), L(-7, 7)

A)  $\left(-\frac{4}{3}, 5\right)$       B)  $\left(-\frac{4}{3}, \frac{14}{3}\right)$

C)  $\left(-\frac{5}{3}, \frac{14}{3}\right)$       D)  $\left(-1, \frac{16}{3}\right)$

10) V(7, 7), W(-6, 7), X(2, 5)

A)  $\left(\frac{5}{3}, \frac{20}{3}\right)$       B)  $\left(1, \frac{17}{3}\right)$

C)  $\left(\frac{2}{3}, 7\right)$       D)  $\left(1, \frac{19}{3}\right)$

11) Q(-2, 1), R(-7, -6), S(11, 1)

A)  $\left(1, -\frac{5}{3}\right)$       B)  $\left(\frac{2}{3}, -\frac{4}{3}\right)$

C)  $\left(\frac{1}{3}, -\frac{4}{3}\right)$       D)  $\left(0, -\frac{2}{3}\right)$

12) V(10, 8), U(-7, 0), T(10, 0)

A)  $\left(\frac{13}{3}, \frac{10}{3}\right)$       B)  $\left(\frac{11}{3}, 3\right)$

C)  $\left(\frac{13}{3}, \frac{8}{3}\right)$       D) (5, 2)



13) W(6, -3), X(-7, -3), Y(1, 2)

A)  $\left(-\frac{2}{3}, -1\right)$       B)  $\left(\frac{2}{3}, -1\right)$

C)  $\left(0, -\frac{4}{3}\right)$       D)  $\left(\frac{1}{3}, -\frac{5}{3}\right)$

14) C(4, -7), D(-6, -7), E(2, 5)

A)  $\left(\frac{1}{3}, -\frac{7}{3}\right)$       B) (0, -3)

C)  $\left(\frac{1}{3}, -\frac{11}{3}\right)$       D)  $\left(\frac{1}{3}, -\frac{8}{3}\right)$

15) I(2, 4), J(-7, -1), K(6, -1)

A)  $\left(\frac{1}{3}, 0\right)$       B) (1, 1)

C) (0, 0)      D)  $\left(\frac{1}{3}, \frac{2}{3}\right)$

16) N(1, -8), M(10, 10), L(-7, 10)

A)  $\left(\frac{2}{3}, 4\right)$       B)  $\left(1, \frac{14}{3}\right)$

C)  $\left(\frac{5}{3}, \frac{11}{3}\right)$       D)  $\left(\frac{4}{3}, 4\right)$

17) F(2, 1), G(9, -8), H(-8, -8)

A)  $\left(1, -\frac{16}{3}\right)$       B)  $\left(\frac{1}{3}, -\frac{13}{3}\right)$

C)  $\left(1, -\frac{13}{3}\right)$       D) (1, -5)

18) P(-7, 7), Q(4, 7), R(-3, 0)

A)  $\left(-\frac{7}{3}, 4\right)$       B)  $\left(-2, \frac{14}{3}\right)$

C)  $\left(-\frac{8}{3}, 4\right)$       D) (-2, 4)

19) S(-6, -5), T(-7, 1), U(2, 1)

A)  $\left(-\frac{11}{3}, -\frac{5}{3}\right)$       B)  $\left(-4, -\frac{1}{3}\right)$

C)  $\left(-\frac{11}{3}, -1\right)$       D) (-4, -1)

20) V(7, -7), W(-3, -7), X(-7, 2)

A) (-1, -4)      B)  $\left(-\frac{2}{3}, -4\right)$

C)  $\left(-\frac{5}{3}, -\frac{11}{3}\right)$       D)  $\left(-1, -\frac{10}{3}\right)$

21) A(-2, -8), B(-2, 4), C(-8, -8)

A)  $\left(-4, -\frac{11}{3}\right)$       B)  $\left(-\frac{13}{3}, -4\right)$

C) (-4, -4)      D)  $\left(-\frac{13}{3}, -\frac{14}{3}\right)$

22) G(-7, -7), F(5, 9), E(12, -7)

A) (3, -2)      B)  $\left(3, -\frac{7}{3}\right)$

C)  $\left(\frac{11}{3}, -\frac{7}{3}\right)$       D)  $\left(\frac{10}{3}, -\frac{5}{3}\right)$

23) H(-7, 5), I(6, 1), J(7, 5)

A)  $\left(\frac{8}{3}, 3\right)$       B)  $\left(2, \frac{11}{3}\right)$

C)  $\left(\frac{5}{3}, 4\right)$       D)  $\left(\frac{4}{3}, 3\right)$

24) M(-3, -7), L(3, 10), K(6, -7)

A)  $\left(\frac{8}{3}, -\frac{4}{3}\right)$       B)  $\left(\frac{8}{3}, -\frac{5}{3}\right)$

C)  $\left(2, -\frac{4}{3}\right)$       D)  $\left(\frac{8}{3}, -2\right)$



## Answers to Assignment (ID: 9)

1) D  
5) B  
9) A  
13) C  
17) D  
21) C

2) B  
6) D  
10) D  
14) B  
18) B  
22) D

3) B  
7) C  
11) B  
15) D  
19) C  
23) B

4) A  
8) D  
12) C  
16) D  
20) A  
24) C



## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Find the coordinates of the centroid of each triangle given the three vertices.**

1) R(-4, -7), S(1, 9), T(7, -7)

A)  $\left(\frac{4}{3}, -\frac{5}{3}\right)$       B) (2, -1)

C)  $\left(\frac{4}{3}, -\frac{4}{3}\right)$       D)  $\left(\frac{5}{3}, -\frac{4}{3}\right)$

2) Z(7, -8), Y(5, 6), X(-2, -8)

A)  $\left(4, -\frac{11}{3}\right)$       B)  $\left(\frac{10}{3}, -4\right)$

C)  $\left(\frac{10}{3}, -\frac{10}{3}\right)$       D)  $\left(3, -\frac{10}{3}\right)$

3) W(-2, 8), V(4, -5), U(-3, -5)

A) (0, -1)      B)  $\left(-\frac{2}{3}, -\frac{4}{3}\right)$

C)  $\left(0, -\frac{2}{3}\right)$       D)  $\left(-\frac{1}{3}, -\frac{2}{3}\right)$

4) X(-7, -2), Y(-4, 6), Z(13, -2)

A)  $\left(0, \frac{2}{3}\right)$       B)  $\left(\frac{2}{3}, \frac{2}{3}\right)$

C)  $\left(1, \frac{2}{3}\right)$       D)  $\left(\frac{1}{3}, 1\right)$

5) F(-7, -7), E(7, -7), D(-3, -1)

A)  $\left(-\frac{2}{3}, -\frac{17}{3}\right)$       B)  $\left(-\frac{2}{3}, -\frac{13}{3}\right)$

C) (-1, -5)      D)  $\left(-\frac{4}{3}, -\frac{13}{3}\right)$

6) G(11, -3), H(9, 5), I(-7, -3)

A)  $\left(\frac{13}{3}, -\frac{1}{3}\right)$       B)  $\left(5, -\frac{1}{3}\right)$

C) (4, 0)      D) (5, -1)

7) J(-7, 2), K(-5, 4), L(10, 4)

A) (-1, 3)      B)  $\left(-\frac{2}{3}, \frac{10}{3}\right)$

C)  $\left(-\frac{2}{3}, \frac{11}{3}\right)$       D)  $\left(0, \frac{11}{3}\right)$

8) G(-6, -2), H(6, -2), I(-7, 4)

A) (-2, 0)      B)  $\left(-\frac{7}{3}, 0\right)$

C)  $\left(-\frac{7}{3}, -\frac{1}{3}\right)$       D)  $\left(-\frac{5}{3}, \frac{1}{3}\right)$

9) Q(12, -7), R(-8, -7), S(-7, -4)

A)  $\left(-\frac{1}{3}, -\frac{16}{3}\right)$       B) (-1, -6)

C)  $\left(-\frac{5}{3}, -\frac{17}{3}\right)$       D)  $\left(-1, -\frac{19}{3}\right)$

10) W(3, -5), X(-3, 2), Y(6, -5)

A)  $\left(2, -\frac{10}{3}\right)$       B)  $\left(2, -\frac{8}{3}\right)$

C)  $\left(\frac{8}{3}, -2\right)$       D)  $\left(\frac{5}{3}, -\frac{8}{3}\right)$

11) T(-8, -7), U(5, 7), V(8, -7)

A)  $\left(\frac{7}{3}, -\frac{5}{3}\right)$       B)  $\left(1, -\frac{8}{3}\right)$

C)  $\left(\frac{5}{3}, -\frac{7}{3}\right)$       D)  $\left(\frac{5}{3}, -2\right)$

12) B(-7, -6), C(5, -6), D(8, 3)

A)  $\left(\frac{5}{3}, -3\right)$       B) (2, -3)

C)  $\left(\frac{5}{3}, -\frac{7}{3}\right)$       D)  $\left(\frac{8}{3}, -\frac{8}{3}\right)$



13) H(8, 3), G(-2, 3), F(8, 0)

A)  $\left(5, \frac{8}{3}\right)$       B)  $\left(\frac{16}{3}, 2\right)$

C)  $\left(5, \frac{7}{3}\right)$       D)  $\left(\frac{14}{3}, 2\right)$

14) I(-7, 1), J(9, -2), K(-7, -2)

A)  $\left(-\frac{4}{3}, -1\right)$       B)  $\left(-\frac{4}{3}, -\frac{1}{3}\right)$

C)  $\left(-1, -\frac{4}{3}\right)$       D)  $\left(-\frac{5}{3}, -1\right)$

15) N(11, -3), M(-8, -3), L(6, -6)

A)  $\left(\frac{10}{3}, -\frac{14}{3}\right)$       B)  $\left(\frac{7}{3}, -4\right)$

C) (3, -4)      D)  $\left(\frac{11}{3}, -\frac{13}{3}\right)$

16) B(9, 2), C(-2, 7), D(-8, 2)

A)  $\left(-\frac{1}{3}, \frac{11}{3}\right)$       B)  $\left(\frac{1}{3}, \frac{13}{3}\right)$

C)  $\left(-1, \frac{13}{3}\right)$       D)  $\left(-1, \frac{10}{3}\right)$

17) S(-3, 7), T(-6, -3), U(-1, -3)

A)  $\left(-\frac{10}{3}, 1\right)$       B) (-4, 1)

C)  $\left(-\frac{11}{3}, -\frac{1}{3}\right)$       D)  $\left(-\frac{10}{3}, \frac{1}{3}\right)$

18) A(-8, 1), B(-5, -4), C(9, 1)

A)  $\left(-\frac{5}{3}, -\frac{4}{3}\right)$       B)  $\left(-\frac{2}{3}, -\frac{1}{3}\right)$

C)  $\left(-\frac{4}{3}, -\frac{2}{3}\right)$       D)  $\left(-\frac{4}{3}, -\frac{1}{3}\right)$

19) V(11, -4), W(-8, -2), X(-5, -4)

A)  $\left(-\frac{1}{3}, -\frac{8}{3}\right)$       B)  $\left(-1, -\frac{11}{3}\right)$

C) (-1, -4)      D)  $\left(-\frac{2}{3}, -\frac{10}{3}\right)$

20) G(12, -3), F(5, 2), E(-7, -3)

A)  $\left(\frac{10}{3}, -\frac{4}{3}\right)$       B)  $\left(3, -\frac{4}{3}\right)$

C)  $\left(4, -\frac{5}{3}\right)$       D)  $\left(3, -\frac{2}{3}\right)$

21) H(9, 2), I(-7, -2), J(7, -2)

A)  $\left(3, -\frac{2}{3}\right)$       B)  $\left(\frac{10}{3}, -\frac{4}{3}\right)$

C) (3, -1)      D)  $\left(\frac{8}{3}, -\frac{2}{3}\right)$

22) K(7, 7), L(7, -1), M(-2, -1)

A)  $\left(4, \frac{5}{3}\right)$       B)  $\left(4, \frac{4}{3}\right)$

C)  $\left(\frac{11}{3}, 1\right)$       D)  $\left(\frac{10}{3}, \frac{7}{3}\right)$

23) K(2, 7), J(5, 0), I(6, 7)

A)  $\left(\frac{14}{3}, \frac{13}{3}\right)$       B)  $\left(\frac{13}{3}, \frac{14}{3}\right)$

C)  $\left(\frac{13}{3}, \frac{16}{3}\right)$       D)  $\left(5, \frac{14}{3}\right)$

24) R(4, -7), S(-4, -7), T(0, 3)

A)  $\left(-\frac{2}{3}, -\frac{13}{3}\right)$       B)  $\left(0, -\frac{11}{3}\right)$

C)  $\left(-\frac{1}{3}, -\frac{13}{3}\right)$       D)  $\left(-\frac{1}{3}, -3\right)$



## Answers to Assignment (ID: 10)

1) A  
5) C  
9) B  
13) D  
17) D  
21) A

2) C  
6) A  
10) B  
14) D  
18) C  
22) A

3) D  
7) B  
11) C  
15) C  
19) D  
23) B

4) B  
8) B  
12) B  
16) A  
20) A  
24) B

