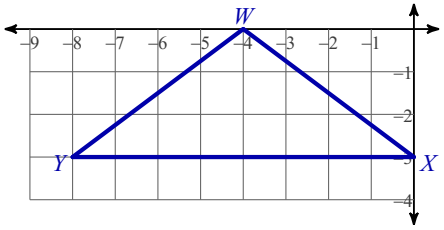
Ms. Mougharbel Name_____

Geometry - Homework 22

Date_____ Period____

Find coordinates of the centroid of each triangle.

1)



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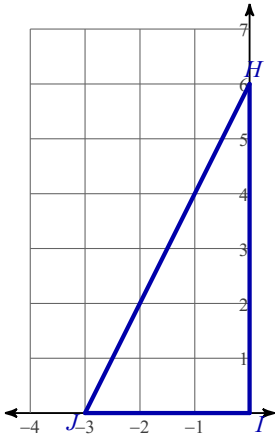

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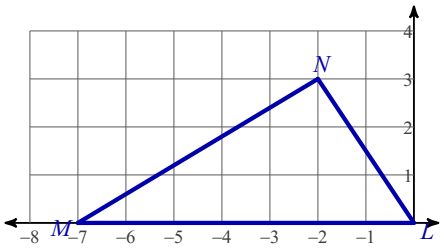

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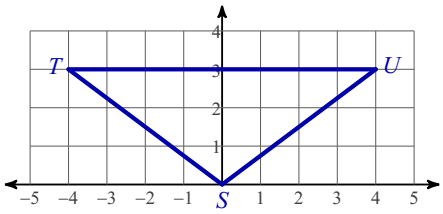

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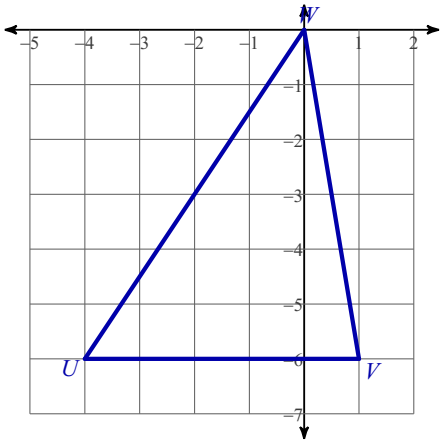

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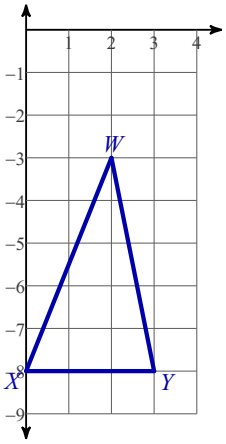
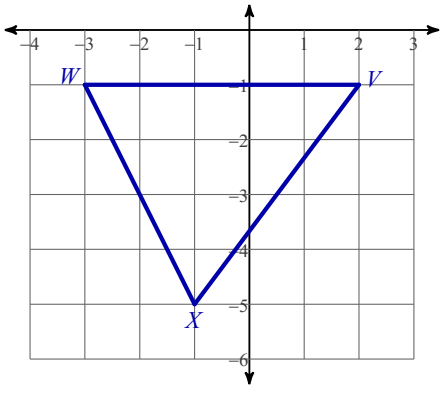
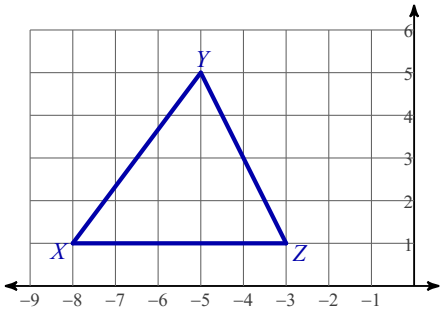


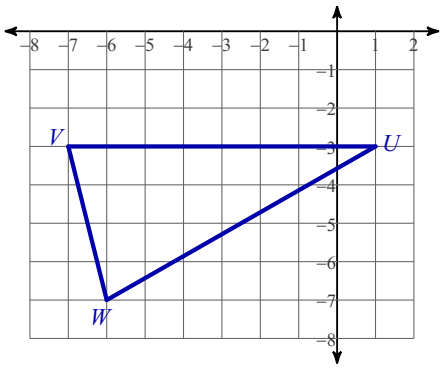
7)



8)



9)



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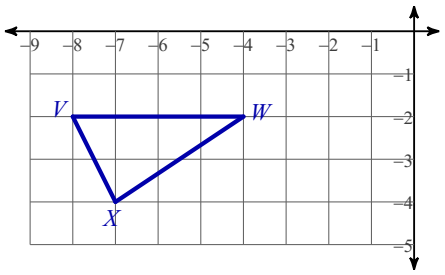

Find the coordinates of the centroid of each triangle given the three vertices.

11) $F(-5, -3)$, $G(6, -3)$, $H(-4, 8)$

12) $V(7, 3)$, $U(-7, 3)$, $T(-6, -3)$

13) $P(-7, -2)$, $Q(-2, 3)$, $R(9, -2)$

14) $R(8, 4)$, $Q(8, -1)$, $P(-8, 4)$

15) $R(-7, -7)$, $S(10, -1)$, $T(-3, -1)$

State if the three numbers can be the measures of the sides of a triangle.

16) 6, 9, 3

17) 10, 9, 11

18) 2, 10, 6

19) 10, 16, 5

20) 7, 16, 8

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

21) 12, 8

22) 6, 8

23) 10, 10

24) 7, 11

25) 6, 12

26) 25, 42

27) 25, 48

28) 41, 48

29) 39, 41

30) 39, 33

Answers to Geometry - Homework 22

1) $(-4, -2)$

3) $(-3, 1)$

5) $(-1, -4)$

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

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

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

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

15) $(0, -3)$

17) Yes

19) No

21) $4 < x < 20$

23) $0 < x < 20$

25) $6 < x < 18$

27) $23 < x < 73$

29) $2 < x < 80$