Geometry Name_____

Review: Midpoint, Distance, Lines, Triangles

Date_____ Block____

Find the midpoint of the line segment with the given endpoints. Express answers as fractions in simplest form.

1) $(-4, 2)$, $(-8, 2)$

2) $(-1, -10)$, $(6, -9)$

3) $(-5, -9)$, $(8, -7)$

4) $(-2, 9)$, $(2, 3)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

5) Endpoint: $(-1, -1)$, midpoint: $(1, -2)$

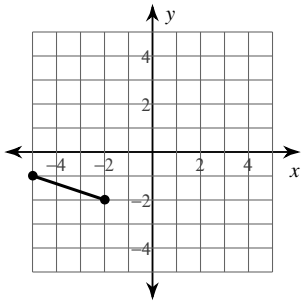
6) Endpoint: $(3, -5)$, midpoint: $(-5, 8)$

7) Endpoint: $(5, -7)$, midpoint: $(1, 10)$

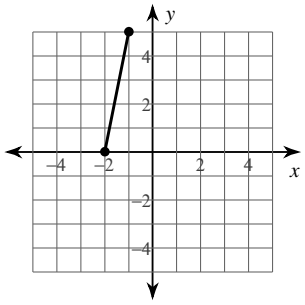
8) Endpoint: $(2, 5)$, midpoint: $(8, -8)$

Find the midpoint of each line segment.

9)



10)



Find the distance between each pair of points in simplest radical form.

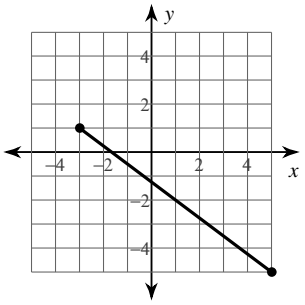
11) $(-4, 4)$, $(2, 0)$

12) $(-1, 8)$, $(-1, 0)$

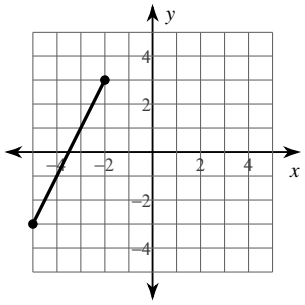
13) $(-8, 8)$, $(-3, 1)$

14) $(2, -4)$, $(4, 8)$

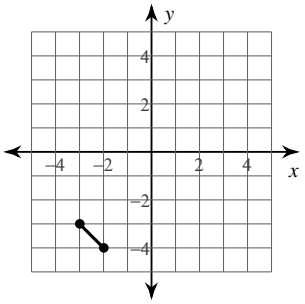
15)



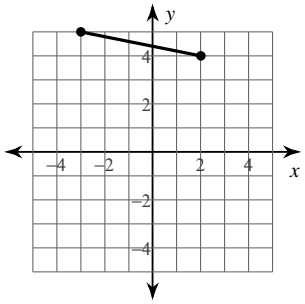
16)



17)



18)



Write the slope-intercept form of the equation of the line described.

19) through: $(-1, 4)$, parallel to $y = -x$

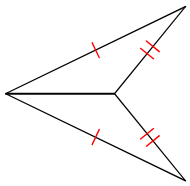
20) through: $(2, -4)$, parallel to $y = -3x + 1$

21) through: $(-2, -3)$, perp. to $y = -\frac{2}{7}x - 2$

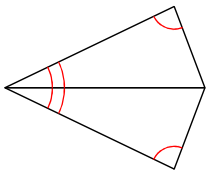
22) through: $(5, 4)$, perp. to $y = -\frac{5}{3}x + 1$

State if the two triangles are congruent. If they are, state how you know.

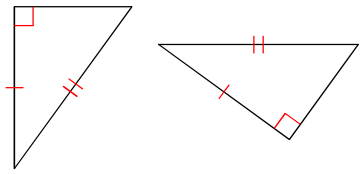
23)



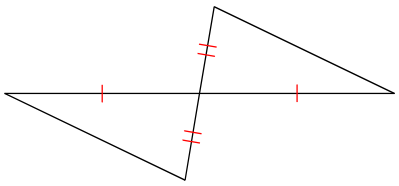
24)



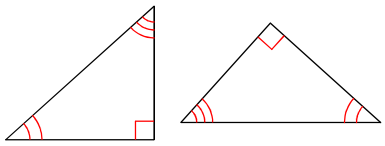
25)



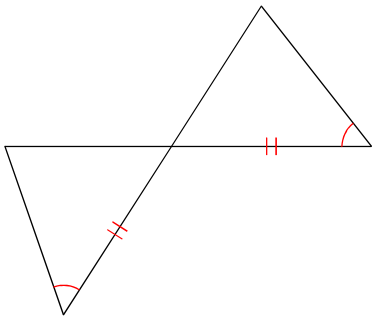
26)



27)



28)



Geometry Name_____

Review: Midpoint, Distance, Lines, Triangles

Date_____ Block____

Find the midpoint of the line segment with the given endpoints. Express answers as fractions in simplest form.

1) $(-4, 2)$, $(-8, 2)$
$(-6, 2)$

2) $(-1, -10)$, $(6, -9)$ $\left(2\frac{1}{2}, -9\frac{1}{2}\right)$

3) $(-5, -9)$, $(8, -7)$ $\left(1\frac{1}{2}, -8\right)$

4) $(-2, 9)$, $(2, 3)$
$(0, 6)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

5) Endpoint: $(-1, -1)$, midpoint: $(1, -2)$
$(3, -3)$

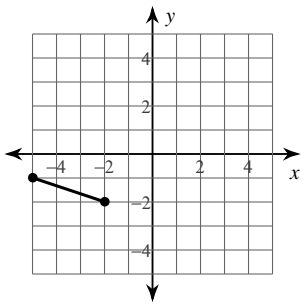
6) Endpoint: $(3, -5)$, midpoint: $(-5, 8)$
$(-13, 21)$

7) Endpoint: $(5, -7)$, midpoint: $(1, 10)$
$(-3, 27)$

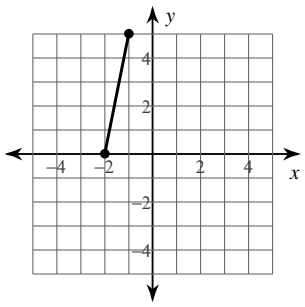
8) Endpoint: $(2, 5)$, midpoint: $(8, -8)$
$(14, -21)$

Find the midpoint of each line segment.

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



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



Find the distance between each pair of points in simplest radical form.

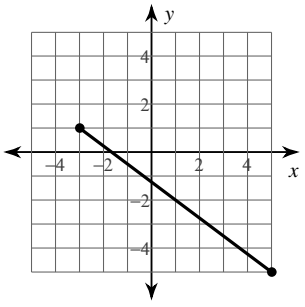
11) $(-4, 4)$, $(2, 0)$
$2\sqrt{13}$

12) $(-1, 8)$, $(-1, 0)$
8

13) $(-8, 8)$, $(-3, 1)$
$\sqrt{74}$

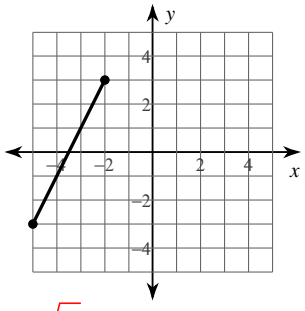
14) $(2, -4)$, $(4, 8)$
$2\sqrt{37}$

15)



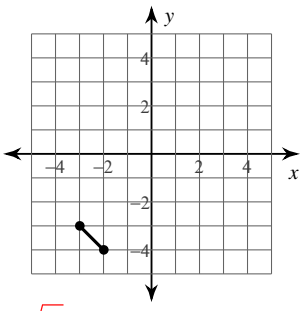
10

16)



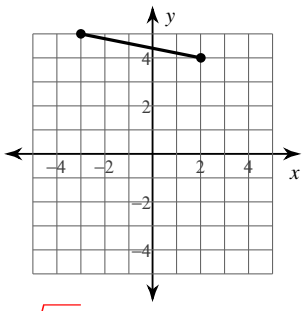
$3\sqrt{5}$

17)



$\sqrt{2}$

18)



$\sqrt{26}$

Write the slope-intercept form of the equation of the line described.

19) through: $(-1, 4)$, parallel to $y = -x$

$y = -x + 3$

20) through: $(2, -4)$, parallel to $y = -3x + 1$

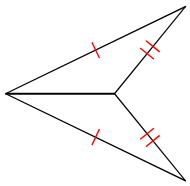
$y = -3x + 2$

21) through: $(-2, -3)$, perp. to $y = -\frac{2}{7}x - 2$ $y = \frac{7}{2}x + 4$

22) through: $(5, 4)$, perp. to $y = -\frac{5}{3}x + 1$ $y = \frac{3}{5}x + 1$

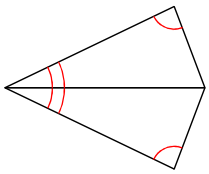
State if the two triangles are congruent. If they are, state how you know.

23)



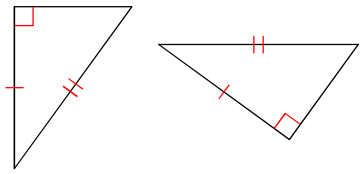
SSS

24)



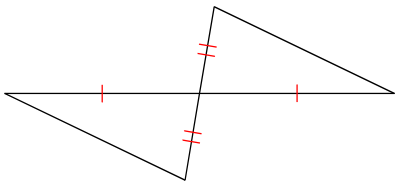
AAS

25)



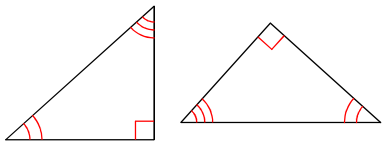
HL

26)



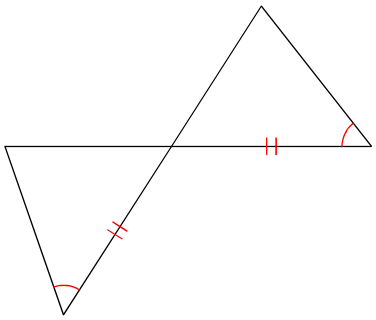
SAS

27)



Not congruent

28)



ASA