Math 1   Name_____
Unit 6.3 Midpoint and Distance Formula PRACTICE   Period____

Find the midpoint of the line segment with the given endpoints.

1) $(-9, 10)$, $(4, -2)$

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

2) $(0, 7)$, $(-8, -10)$

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

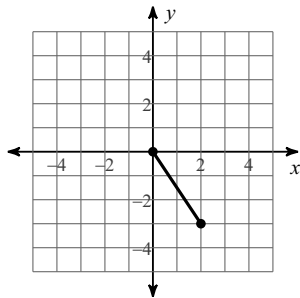3) $(-6.4, -3.8)$, $(9.6, 1.2)$

$(1.6, -1.3)$

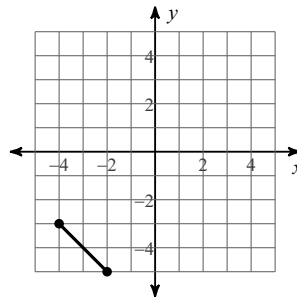4) $(1.3, 9.3)$, $(-4, -0.8)$

$(-1.35, 4.25)$

Find the midpoint of each line segment. Give answer in reduced fraction form.

5)

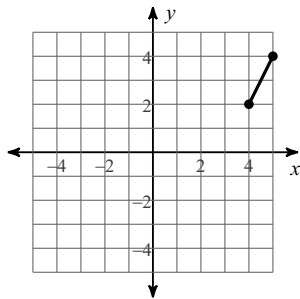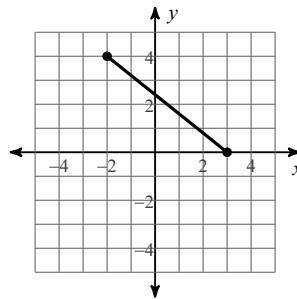

$\left(1, -1\frac{1}{2}\right)$

6)

$(-3, -4)$

7)

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

8)

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

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

9) Endpoint: $(1.7, -1.6)$, midpoint: $(-4.9, 8.8)$

$(-11.5, 19.2)$

10) Endpoint: $(-2.2, 4.7)$, midpoint: $(8.5, -8.5)$

$(19.2, -21.7)$

11) Endpoint: $(-4, 2)$, midpoint: $(-4, 7)$

$(-4, 12)$

12) Endpoint: $(-2, 1)$, midpoint: $(1, -6)$

$(4, -13)$

-1-

Find the distance between each pair of points. Give answer in simplified radical form.

13) $(-7, 0)$, $(-1, -1)$

$\sqrt{37}$

14) $(2, 0)$, $(6, 2)$

$2\sqrt{5}$

15) $(8, -8)$, $(4, 6)$

$2\sqrt{53}$

16) $(-2, 8)$, $(-3, -1)$

$\sqrt{82}$

17) $(-8, -1)$, $(7, 4)$

$5\sqrt{10}$

18) $(-1, -8)$, $(6, 3)$

$\sqrt{170}$

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.
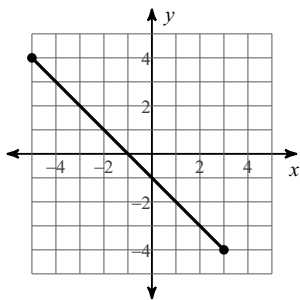
19) $(-4.7, -6.1)$, $(-4.5, -7.5)$

1.4

20) $(7.3, 5.5)$, $(3, -1.5)$

8.2

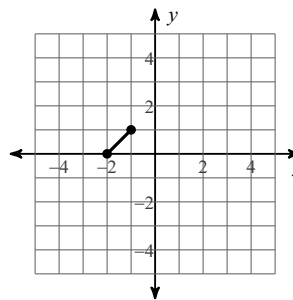**Find the distance between each pair of points. Give answer in simplified radical form.**
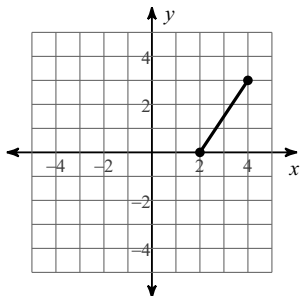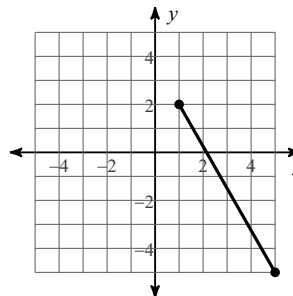
21)

$8\sqrt{2}$

22)

$\sqrt{2}$

23)

$\sqrt{13}$

24)

$\sqrt{65}$