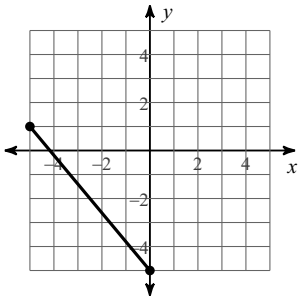
Geometry Honors (wkst 10.6) Name_____ ID: 1

Distance and Midpoint Formulas

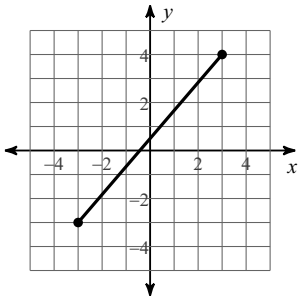
Date_____ Period____

Find the distance between each pair of points.

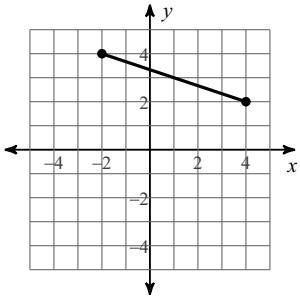
1)



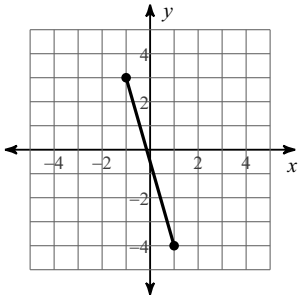
2)



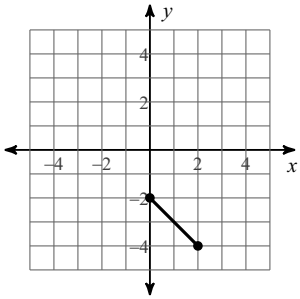
3)



4)



5)



6) $(7, -4)$, $(-6, 4)$

7) $(4, 6)$, $(2, 2)$

8) $(-2, -1)$, $(-1, 0)$

9) $(-8, -1)$, $(4, -3)$

10) $(6, 7)$, $(5, 0)$

11) $(-7, 6)$, $(-4, 6)$

12) $(5, 4)$, $(2, 8)$

13) $(3, -3)$, $(-5, 2)$

14) $(-8, -3)$, $(-4, 2)$

15) $(-5, 2)$, $(5, 8)$

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

16) $(5, -7)$, $(-6, 8)$

17) $(-4, 3)$, $(-1, 7)$

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

19) $(4, -10)$, $(-4, -2)$

20) $(1, 7)$, $(0, -2)$

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

21) Endpoint: $(-9, -4)$, midpoint: $(1, 1)$

22) Endpoint: $(-8, 9)$, midpoint: $(9, 3)$

23) Endpoint: $(0, -8)$, midpoint: $(-3, -1)$

24) Endpoint: $(3, 9)$, midpoint: $(-2, 8)$

25) Endpoint: $(-8, -7)$, midpoint: $(-8, 8)$

Answers to Distance and Midpoint Formulas (ID: 1)

1) $\sqrt{61}$
2) $\sqrt{85}$
3) $2\sqrt{10}$
4) $\sqrt{53}$
5) $2\sqrt{2}$
6) $\sqrt{233}$
7) $2\sqrt{5}$
8) $\sqrt{2}$
9) $2\sqrt{37}$
10) $5\sqrt{2}$
11) 3
12) 5
13) $\sqrt{89}$
14) $\sqrt{41}$
15) $2\sqrt{34}$
16) $\left(-\frac{1}{2}, \frac{1}{2}\right)$
17) $\left(-2\frac{1}{2}, 5\right)$
18) $(-7, 6)$
19) $(0, -6)$
20) $\left(\frac{1}{2}, 2\frac{1}{2}\right)$
21) $(11, 6)$
22) $(26, -3)$
23) $(-6, 6)$
24) $(-7, 7)$
25) $(-8, 23)$