Algebra 1

Name_____

Assignment

Date_____ Period_____

Given the midpoint and one endpoint of a line segment, find the other endpoint.

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

2) Endpoint: $(-6, -1)$, midpoint: $(-5, 0)$

3) Endpoint: $(-2, 8)$, midpoint: $(8, -6)$

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

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

6) Endpoint: $(-8, -5)$, midpoint: $(-4, -2)$

7) Endpoint: $(2, -5)$, midpoint: $(-4, 2)$

8) Endpoint: $(-1, 4)$, midpoint: $(-2, 5)$

9) Endpoint: $(-2, -5)$, midpoint: $(1, 8)$

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

11) Endpoint: $(8, -5)$, midpoint: $(-2, 1)$

12) Endpoint: $(-4, -1)$, midpoint: $(1, 6)$

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

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

15) Endpoint: $(5, 3)$, midpoint: $(8, -4)$

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

16) $(7, -1)$, $(8, 6)$

17) $(1, -1)$, $(-2, 8)$

18) $(3, 7)$, $(-4, 5)$

19) $(-6, 3)$, $(5, -2)$

20) $(0, 3)$, $(8, -4)$

21) $(4, 3)$, $(3, 7)$

22) $(7, -5)$, $(-7, 4)$

23) $(-3, 8)$, $(-7, -3)$

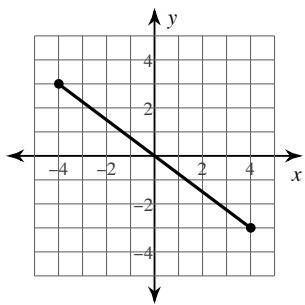**Find the distance between each pair of points.**
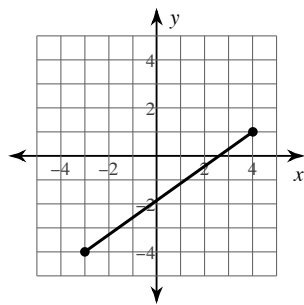
24) $(-4, -5)$, $(-5, 3)$

25) $(3, 3)$, $(-2, -7)$

26) $(-7, 7)$, $(-2, 3)$
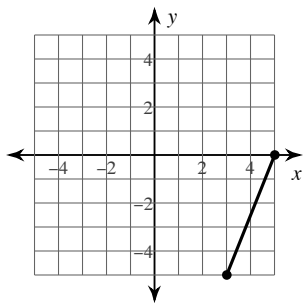
27) $(-1, -1)$, $(0, -6)$

28)

29)

30)

31)
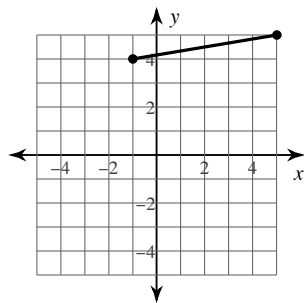
Answers to Assignment (ID: 1)

1) $(-19, -5)$

2) $(-4, 1)$

3) $(18, -20)$

4) $(-7, -13)$

5) $(4, 11)$

6) $(0, 1)$

7) $(-10, 9)$

8) $(-3, 6)$

9) $(4, 21)$

10) $(-17, 3)$

11) $(-12, 7)$

12) $(6, 13)$

13) $(18, -18)$

14) $(-10, -3)$

15) $(11, -11)$

16) $\left(7\frac{1}{2}, 2\frac{1}{2}\right)$

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

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

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

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

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

22) $\left(0, -\frac{1}{2}\right)$

23) $\left(-5, 2\frac{1}{2}\right)$

24) $\sqrt{65}$

25) $5\sqrt{5}$

26) $\sqrt{41}$

27) $\sqrt{26}$

28) 10

29) $\sqrt{74}$

30) $\sqrt{29}$

31) $\sqrt{37}$