

Distance, Midpoint, and Slope Formulas

Find the distance between each pair of points.

1) $(0, -8), (-6, 0)$

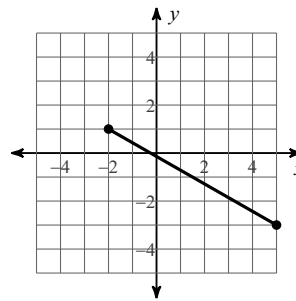
2) $(-7, -1), (-2, -4)$

3) $(4, 3), (-3, 6)$

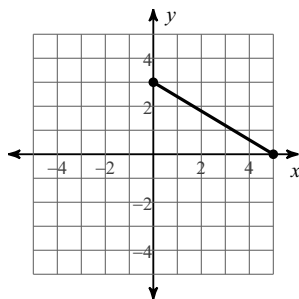
4) $(6, 3), (-2, -3)$

5) $(-1, -6), (3, 7)$

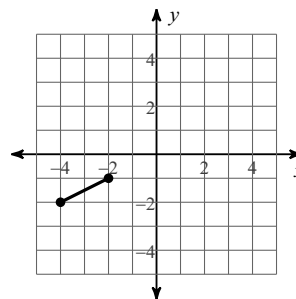
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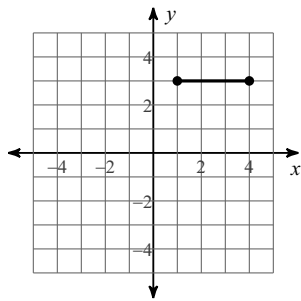
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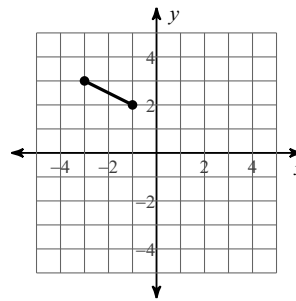
8)



9)



10)



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

11) $(8, -4), (2, -1)$

12) $(7, 3), (-7, -8)$

13) $(7, -1), (-5, 6)$

14) $(0, 6), (2, -7)$

15) $(7, -3), (-3, -7)$

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

16) Endpoint: $(7, -9)$, midpoint: $(8, -4)$

17) Endpoint: $(-4, -9)$, midpoint: $(1, 8)$

18) Endpoint: $(-1, -3)$, midpoint: $(-5, -4)$

19) Endpoint: $(-9, 6)$, midpoint: $(5, -10)$

20) Endpoint: $(-3, 2)$, midpoint: $(9, 0)$

Find the slope of the line through each pair of points.

21) $(2, 1), (15, 10)$

22) $(-5, -16), (-14, -5)$

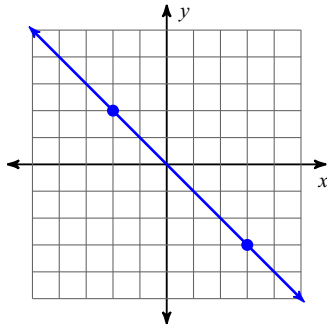
23) $(11, 18), (13, -17)$

24) $(-10, -1), (-17, 14)$

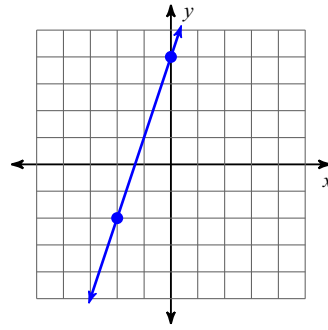
25) $(-12, 9), (7, 0)$

Find the slope of each line.

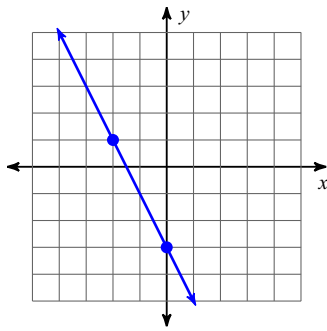
26)



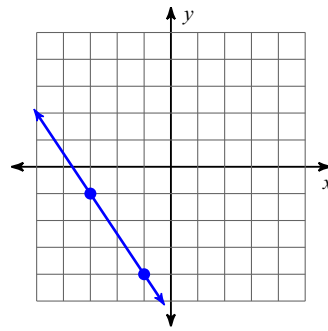
27)



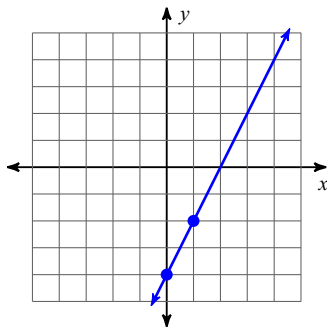
28)



29)



30)



Distance, Midpoint, and Slope Formulas

Find the distance between each pair of points.

1) $(0, -8), (-6, 0)$

10

2) $(-7, -1), (-2, -4)$

$\sqrt{34}$

3) $(4, 3), (-3, 6)$

$\sqrt{58}$

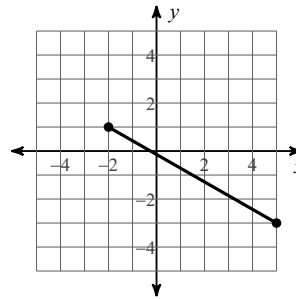
4) $(6, 3), (-2, -3)$

10

5) $(-1, -6), (3, 7)$

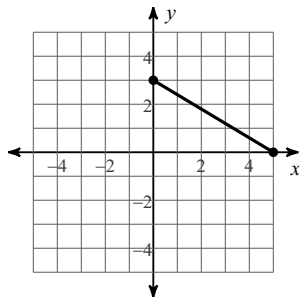
$\sqrt{185}$

6)



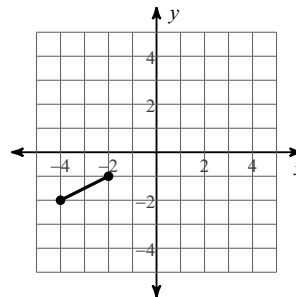
$\sqrt{65}$

7)



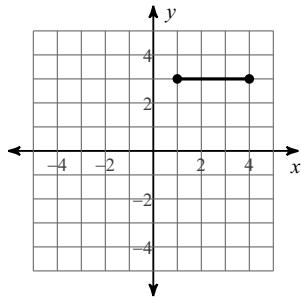
$\sqrt{34}$

8)



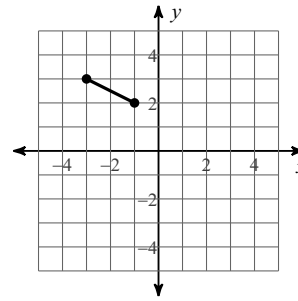
$\sqrt{5}$

9)



3

10)

 $\sqrt{5}$

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

11) $(8, -4), (2, -1)$

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

12) $(7, 3), (-7, -8)$

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

13) $(7, -1), (-5, 6)$

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

14) $(0, 6), (2, -7)$

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

15) $(7, -3), (-3, -7)$

$$(2, -5)$$

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

16) Endpoint: $(7, -9)$, midpoint: $(8, -4)$

$$(9, 1)$$

17) Endpoint: $(-4, -9)$, midpoint: $(1, 8)$

$$(6, 25)$$

18) Endpoint: $(-1, -3)$, midpoint: $(-5, -4)$
 $(-9, -5)$

19) Endpoint: $(-9, 6)$, midpoint: $(5, -10)$
 $(19, -26)$

20) Endpoint: $(-3, 2)$, midpoint: $(9, 0)$
 $(21, -2)$

Find the slope of the line through each pair of points.

21) $(2, 1), (15, 10)$
 $\frac{9}{13}$

22) $(-5, -16), (-14, -5)$
 $-\frac{11}{9}$

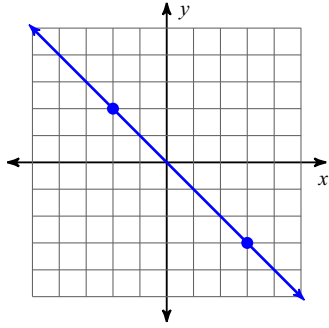
23) $(11, 18), (13, -17)$
 $-\frac{35}{2}$

24) $(-10, -1), (-17, 14)$
 $-\frac{15}{7}$

25) $(-12, 9), (7, 0)$
 $-\frac{9}{19}$

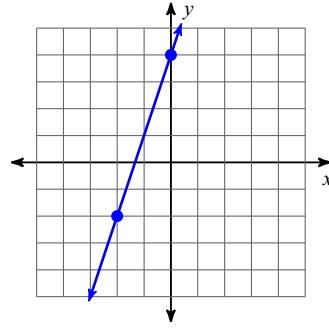
Find the slope of each line.

26)



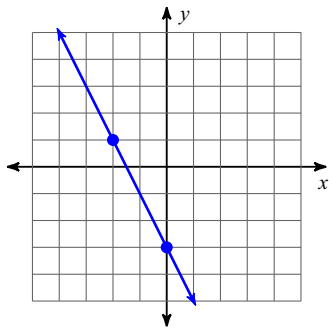
-1

27)



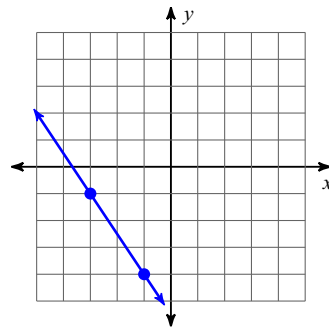
3

28)



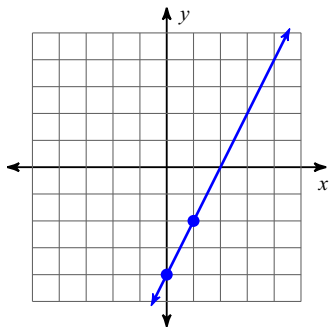
-2

29)



$-\frac{3}{2}$

30)



2