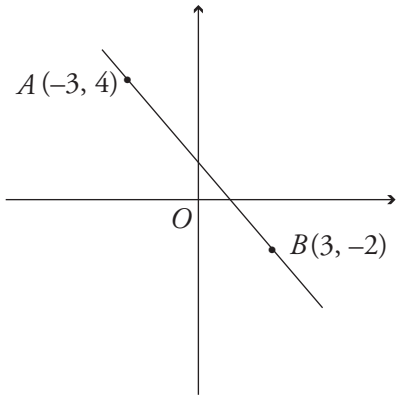
Drill 4

Answers can be found in Part IV.



a. How many units do you count up (rise) to get from point *B* to point *A*? _____

b. How many units must you count over (run) to get from point *A* to point *B*? _____

c. What is the slope of the line above? _____

(Remember, the line is going down to the right, so it must have a negative slope.)

d. What would be the slope of a line parallel to *AB*? _____

e. What would be the slope of a line perpendicular to *AB*? _____

f. What is the distance from point *A* to point *B*? _____

g. What is the midpoint of line segment *AB*? _____

2

If $y = 6x + 3$ and $y = cx + 3$ are the equations of perpendicular lines, then what is the value of c ?

A) -6

B) $-\frac{1}{6}$

C) $\frac{1}{6}$

D) 6

3

What is the y-intercept of the line with equation $2x + 3y = 12$?

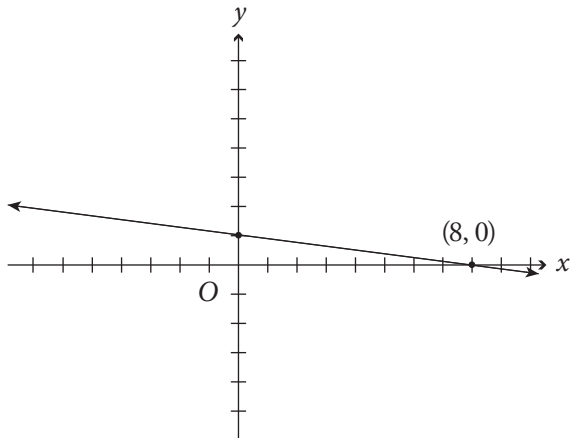
A) 4

B) 3

C) 2

D) $\frac{1}{4}$

7



Which of the following could be the equation of the line in the graph above?

A) $2y - x = -8$

B) $4y + x = -8$

C) $8y - 3x = 8$

D) $8y + x = 8$

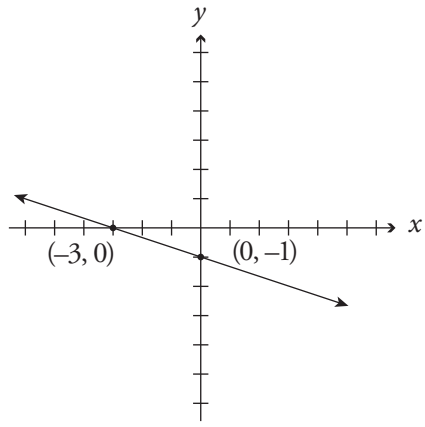
17

$$y = 4x^2 - 6x + 4$$
$$y = 2x + 4$$

The equations above intersect at two points. What is the product of the y-coordinates of the two points of intersection?

	/	/	
.	.	.	.
	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

6



Line l is shown in the graph above. If line m is parallel to line l, which of the following could be the equation of line m ?

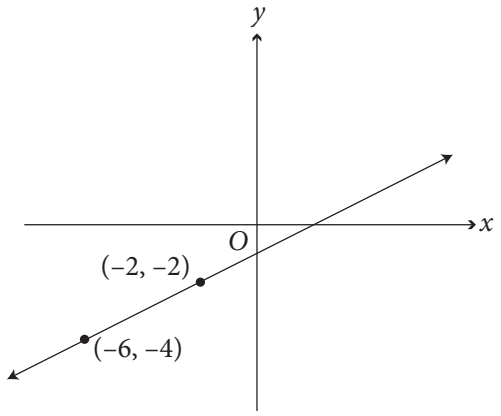
A) $y = -3x - 1$

B) $y = -\frac{1}{3}x + 2$

C) $y = \frac{1}{3}x - 3$

D) $y = 3x + 2$

12



What is the x-intercept of the line in the graph above?

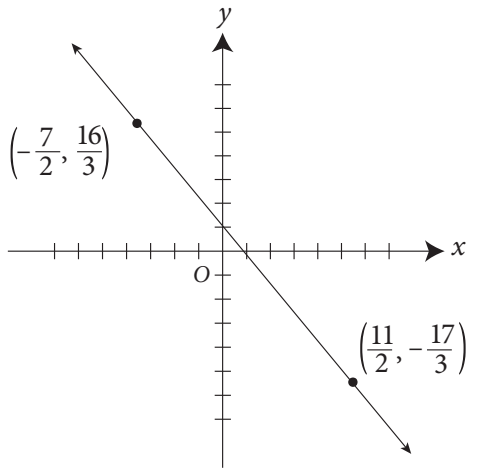
A) –1

B) 0

C) 1

D) 2

14



Which of the following is the slope of the line in the graph above?

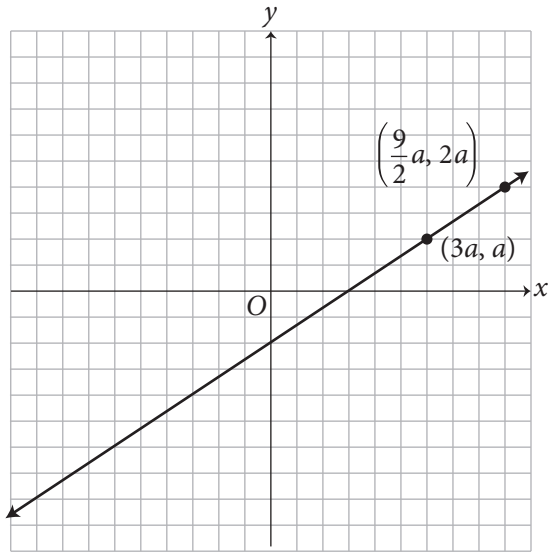
A) $-\frac{11}{6}$

B) $-\frac{11}{9}$

C) $-\frac{9}{8}$

D) $-\frac{9}{11}$

15



The graph of a line is shown in the xy-plane above. It contains the points $(3a, a)$ and $\left(\frac{9}{2}a, 2a\right)$, where a is a positive constant. Which of the following could be the equation of this line?

A) $y = \frac{2}{3}x - 2$

B) $y = \frac{2}{3}x + 2$

C) $y = \frac{4}{3}x - 2$

D) $y = \frac{3}{2}x - 2$