

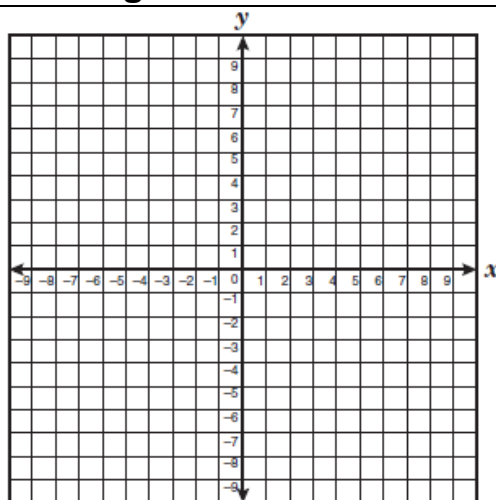
NAME \_\_\_\_\_

DATE \_\_\_\_\_

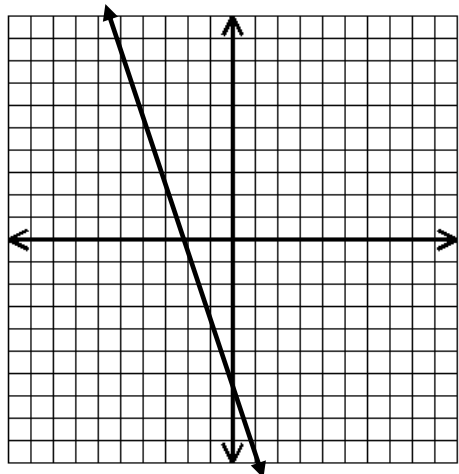
PER. \_\_\_\_\_

**Retest Review: Parameter Changes**

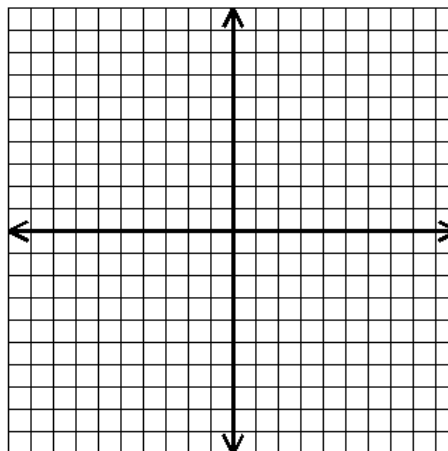
1. Write and graph the linear function that includes the points (4, 9) and (-2, -6).



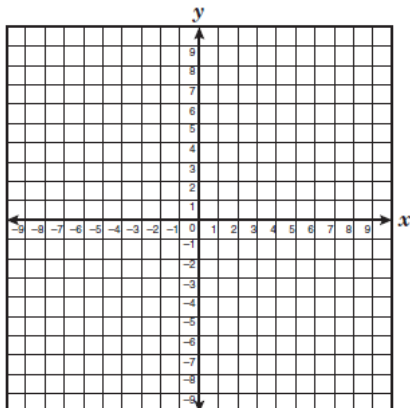
2. The graph of a line that contains the points (-3, 2) and (-1, -4) is shown below.



- Graph the line where the slope is doubled and the y-intercept remains constant.



3. Find the x- and y-intercepts of the given line:  
 $6x - 8y = -24$

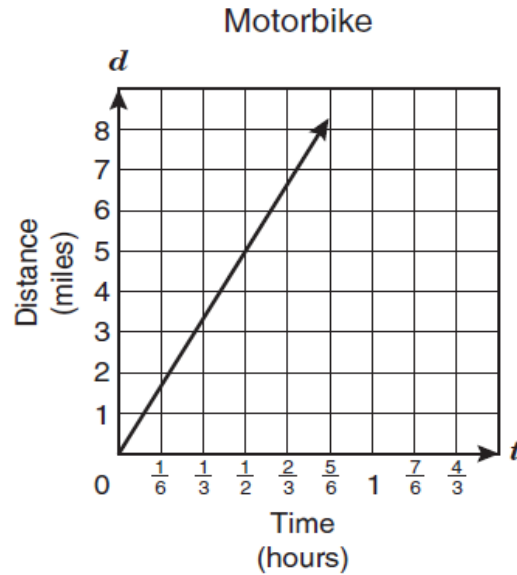


x-int: \_\_\_\_\_

y-int: \_\_\_\_\_

4. Write the equation of a line that contains the point (-6, -5) and has a slope of  $\frac{1}{2}$ .

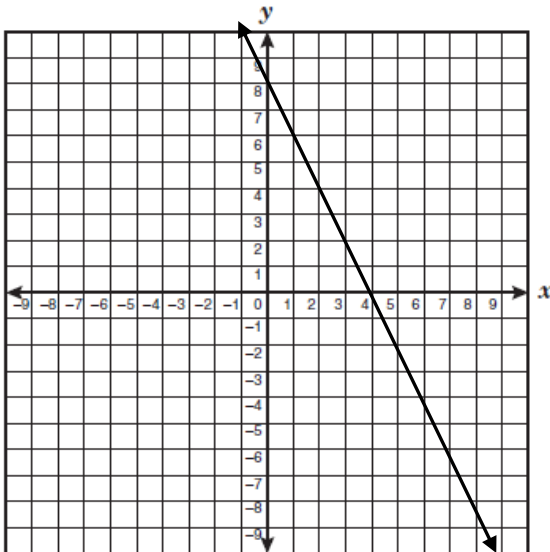
5 The graph shows the distance a certain motorbike can travel at a constant speed with respect to time.



Which of the following statements is true?

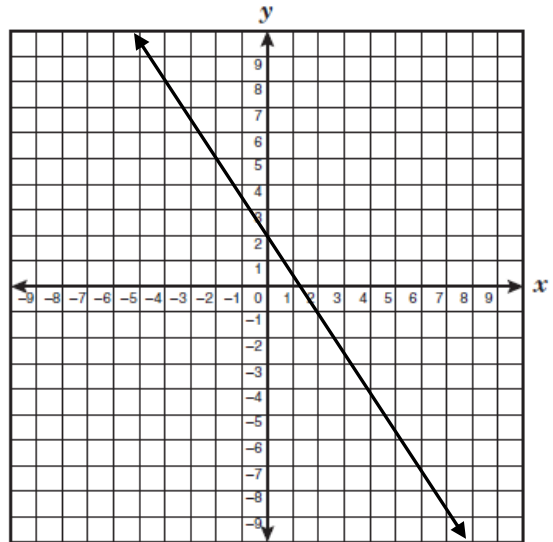
- A. In 1 hour the motorbike travels 8 miles.
- B. As the time increases, the distance decreases.
- C. The motorbike travels 5 miles in  $\frac{1}{2}$  hour.
- D. If the trend continues, the motorbike will travel 6 miles in an hour.

6. What is the equation of the linear function graphed below?



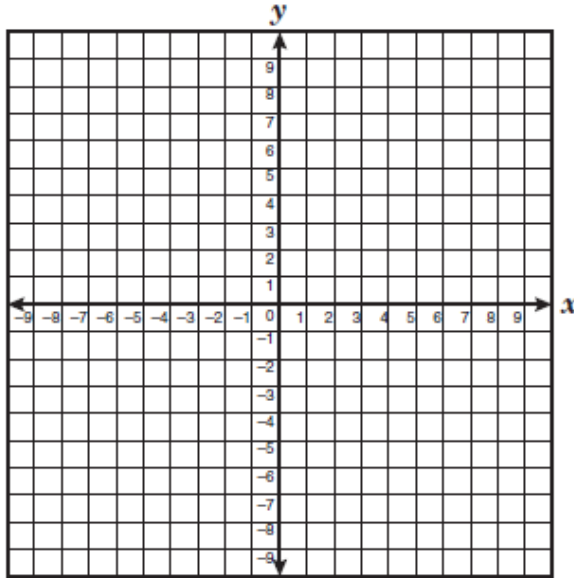
Equation: \_\_\_\_\_

7. What are the slope and y-intercept of the equation of the line graphed below?



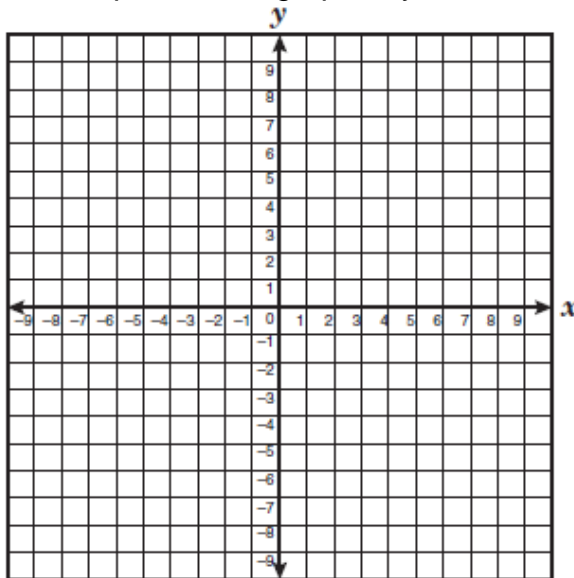
Slope : \_\_\_\_\_ y-intercept: \_\_\_\_\_

8. If the slope of the equation  $y = -\frac{2}{3}x - 6$  is changed to  $\frac{3}{2}$  and the y-intercept is changed to  $(0, 2)$ , which statement best describes this situation?



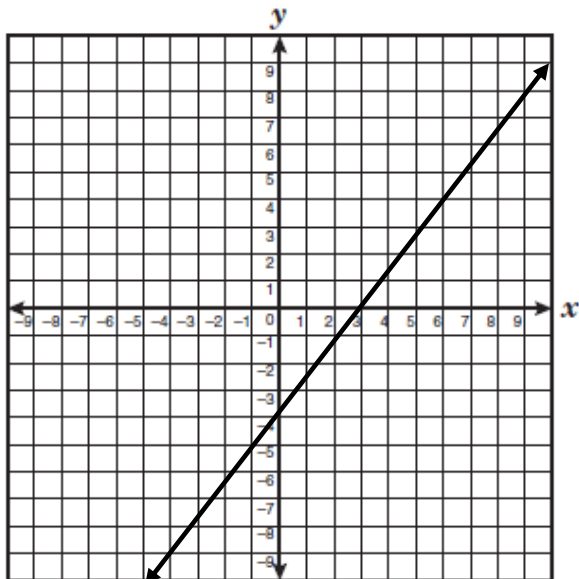
- A. The new line is perpendicular to the original line.  
 B. The new line is parallel to the original line.  
 C. The new line and the original line have the same y-intercept.  
 D. The new line and the original line have the same x-intercept.

9. How does the graph of  $y = 2x - 5$  compare to the graph of  $y = 3x - 5$ ?



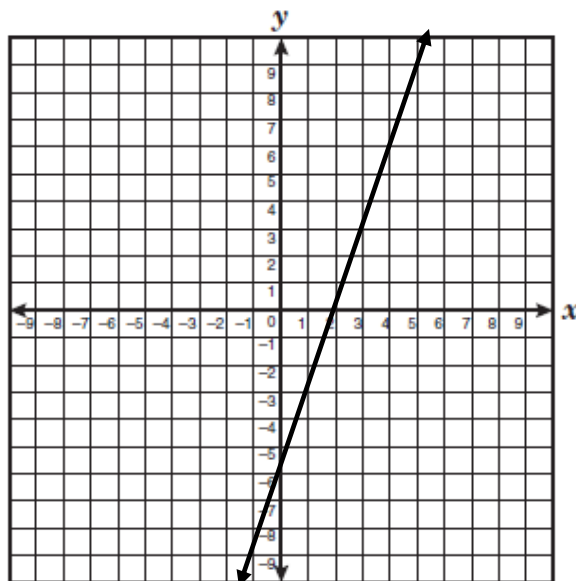
- A. The slope of  $y = 2x - 5$  is less steep.  
 B. The slope of  $y = 2x - 5$  is steeper.  
 C. The graph of  $y = 2x - 5$  has a greater y-intercept.  
 D. The graph of  $y = 2x - 5$  has a smaller y-intercept.

10. The graph of a line is shown below.



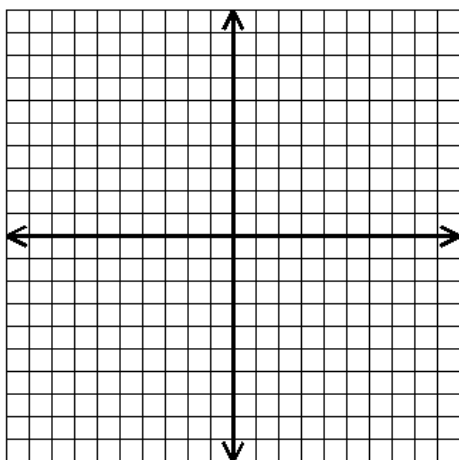
If the slope of this line is multiplied by -2 and the y-intercept increases by 1, what is the equation of the new line?

11. Which best describes the effect on the graph of  $f(x) = 3x - 6$  if the y-intercept is changed to 4?

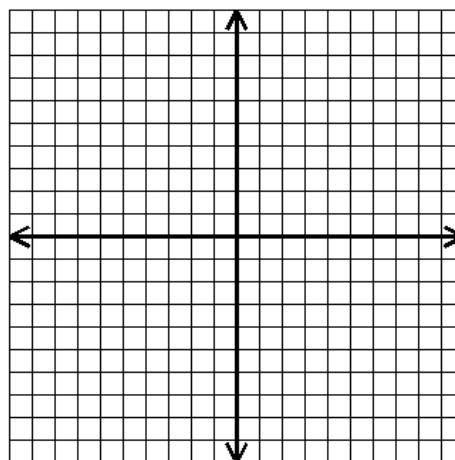


- A. The new line passes through the origin.
- B. The x-intercept decreases.
- C. The slope decreases.
- D. The y-intercept decreases.

12. Graph  $6x + y = 8$



13. Graph  $3x + 4y = -12$



Answers in random order:

- $y = -2x + 8$      $y = \frac{5}{2}x - 1$      $(0, 3)$      $(-4, 0)$     A    C    B    A     $-\frac{3}{2}$     2     $y = -6x - 7$   
 $y = \frac{1}{2}x - 2$      $y = -\frac{8}{3}x - 3$      $y = -6x + 8$      $y = -\frac{3}{4}x - 3$