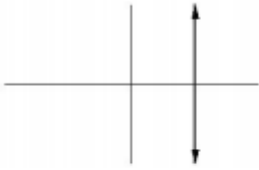


iRAT / tRAT : Linear Equations 2

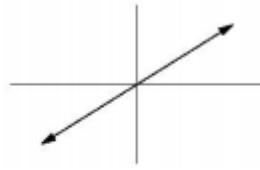
Question 1

Which of these graphs has a slope of zero?

(a)



(b)



(c)

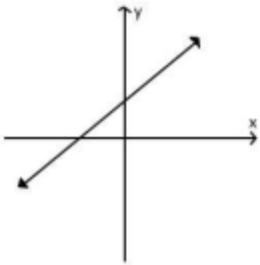


(d)



Question 2

Which statement is true about the graph?



(a) $m < 0, b > 0$

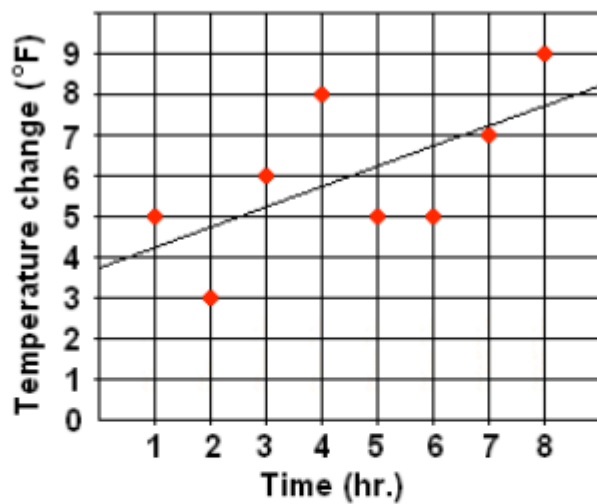
(c) $m > 0, b > 0$

(b) $m < 0, b < 0$

(d) $m > 0, b < 0$

Question 3

Greg recorded the temperature change over a course of 8 hours.

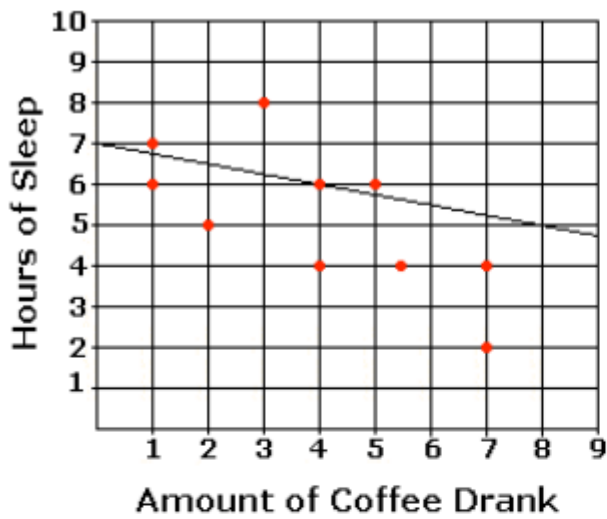


Use the given line of best fit to approximate the rate of change relative to the scatter plot above.

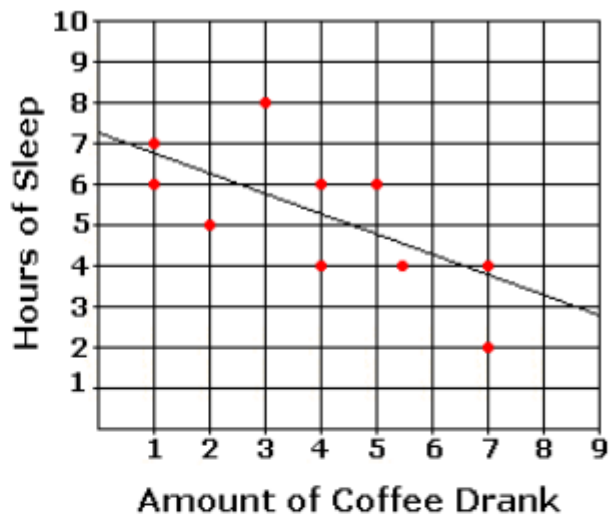
- A. 1 degree/hour
- B. $\frac{1}{2}$ degree/hour
- C. $3\frac{3}{4}$ degrees/hour
- D. 2 degrees/hour

Question 4

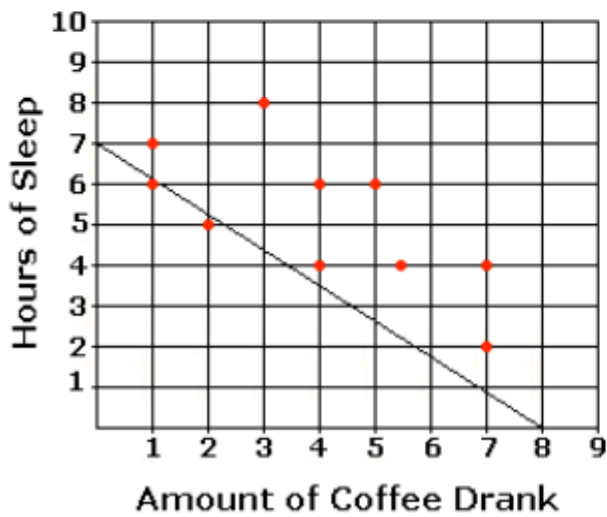
Which is the best line of best fit?



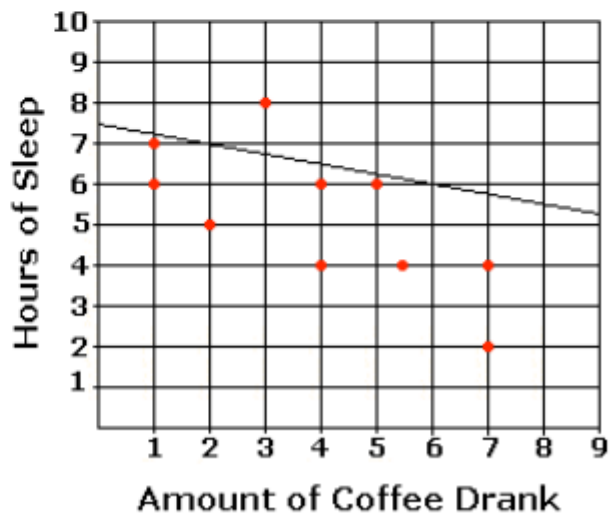
A



B



C



D

Question 5

The graph of the equation $y = -3x - 5$ has the following characteristics:

- (a) slope = 5, y-int = 3 (b) slope = 3, y-int = 5
(c) slope = -3, y-int = 5 (d) slope = -3, y-int = -5

Question 6

The slope of the line parallel to the line $y = -\frac{1}{2}x + 3$ is:

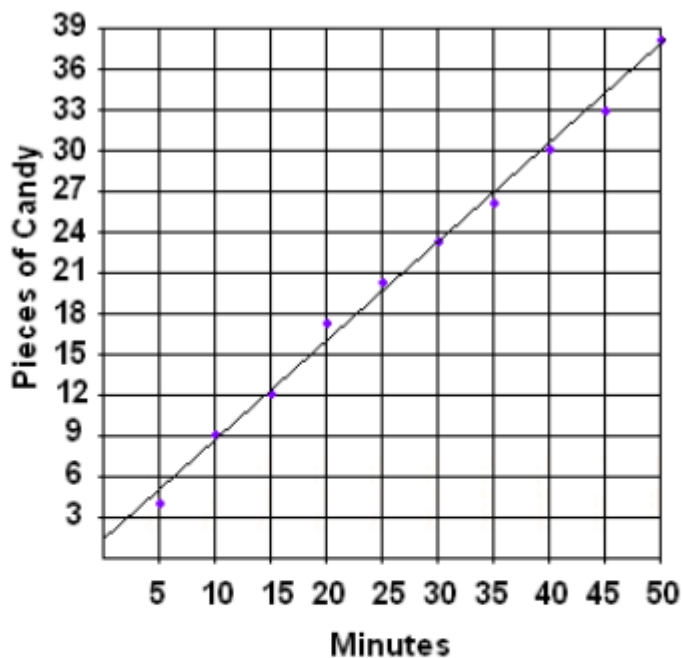
- (a) 2 (b) $\frac{1}{2}$ (c) $-\frac{1}{2}$ (d) -2

Question 7

For the linear equation $3x + 4y = 12$, the x -intercept is

- (a) $(4, 0)$ (b) $(0, -3)$ (c) $(-4, 0)$ (d) $(0, 3)$

Question 8

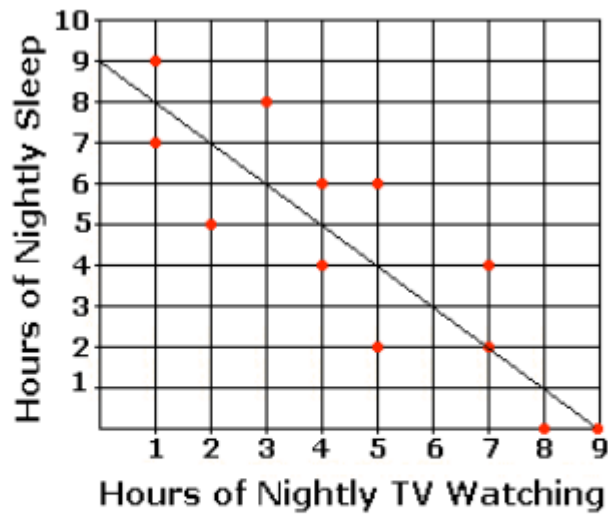


Which of the following equations represents the line that is drawn above?

- A. $y = 0.72x - 1.4$
- B. $y = 0.72x + 1.4$
- C. $y = -0.72x + 1.4$
- D. $y = -0.72x - 1.4$

Question 9

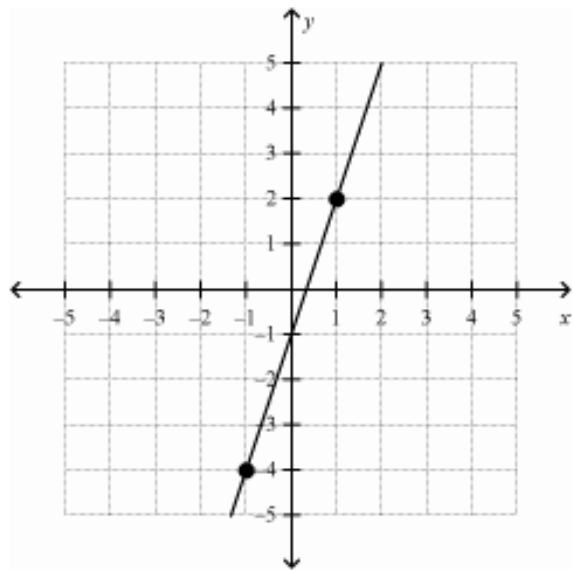
Write the equation for the line of best fit for the scatter plot below.



- A. $y = -\frac{3}{4}x + 9$
- B. $y = -x + 9$
- C. $y = -\frac{1}{2}x + 9$
- D. $y = -\frac{5}{4}x + 9$

Question 10

Write the slope-intercept form of the equation for the line.



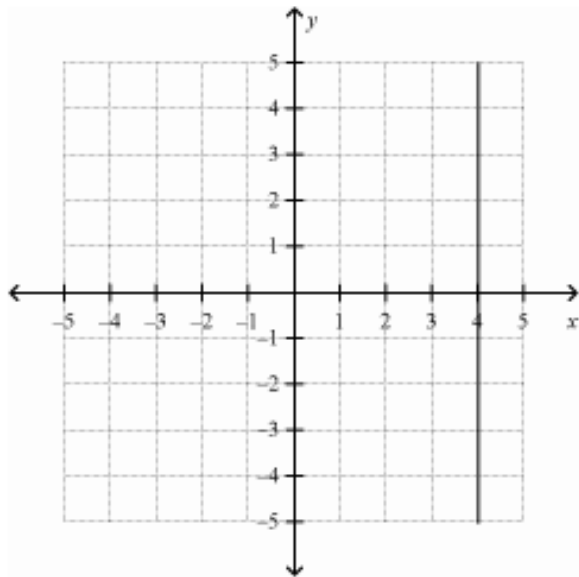
- a. $y = 3x - 1$
- b. $y = -3x - 1$
- c. $y = \frac{1}{3}x + 1$
- d. $y = \frac{1}{3}x - 1$

Question 11

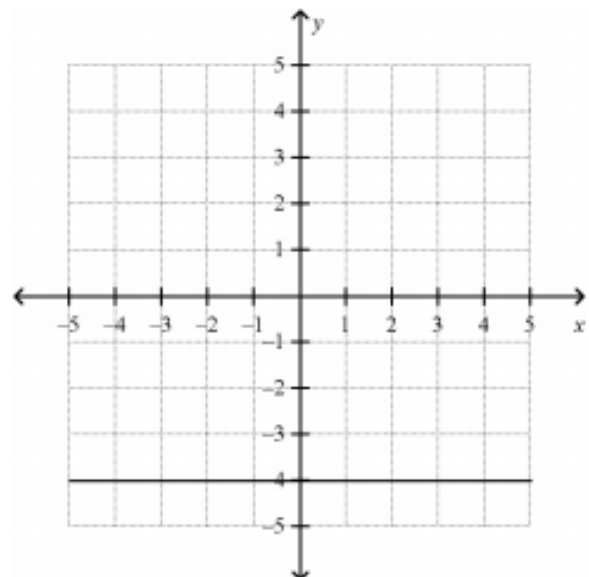
Graph the equation

$x = -4$

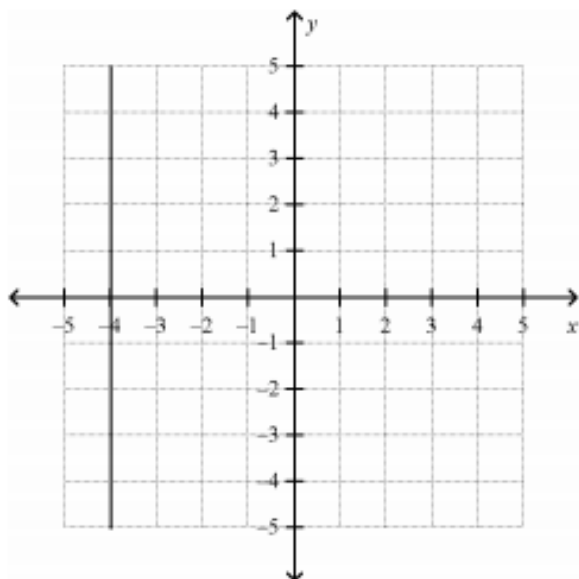
a.



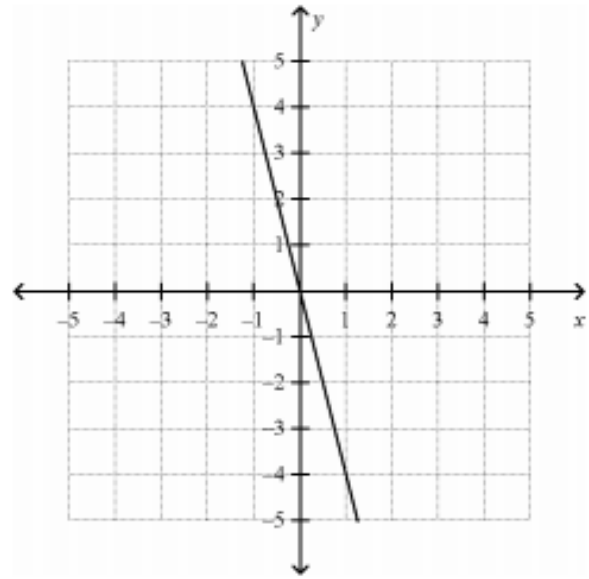
c.



b.



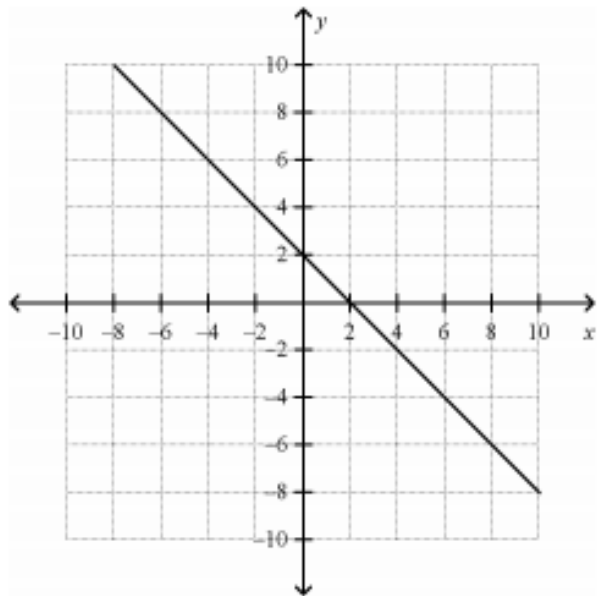
d.



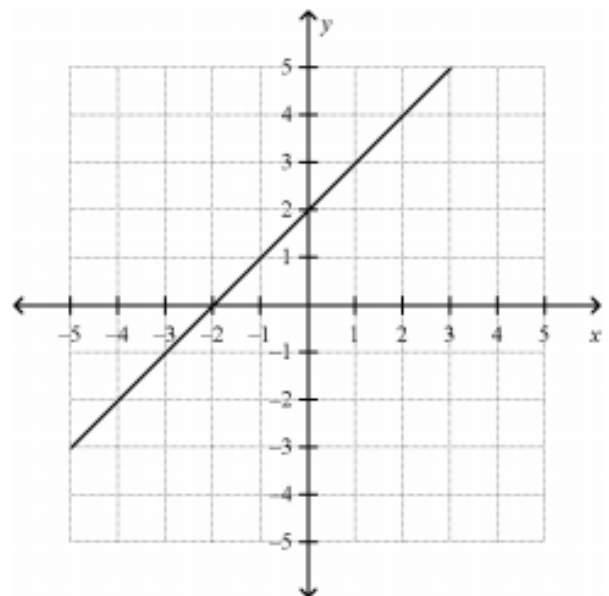
Question 12

$$y + 2 = -(x - 4)$$

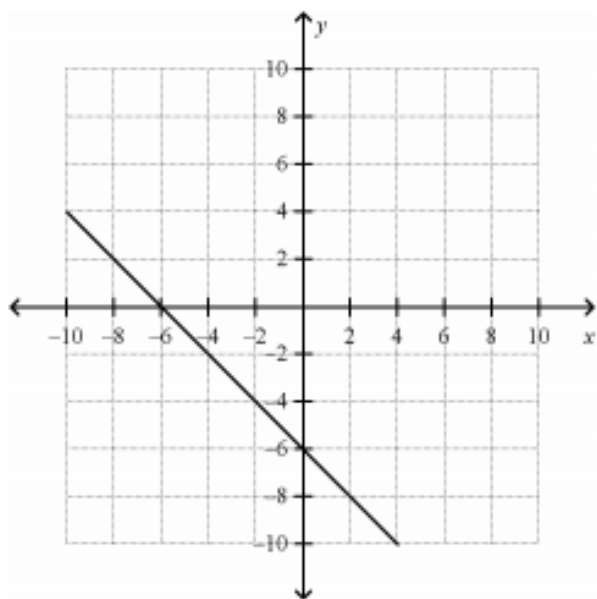
a.



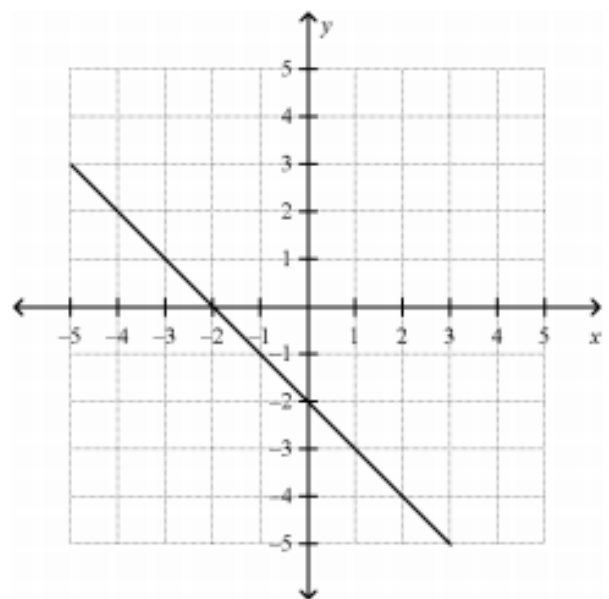
c.



b.



d.



Question 13

Betsy observed the punch volume at the beginning of school party. The information is in the table below.

Minutes	Volume of Punch (L)
1	50
2	46
3	41
4	43
5	38
6	34
7	37
8	30
9	28
10	27

If the best-fit equation is $y = -2.485x + 51.067$, what will the approximate volume of punch be at the 13 minute mark?

- A.** 18.762 L **C.** 17.973 L
B. 23.733 L **D.** 16.764 L

Question 14

For the linear equation $3x + 4y = 12$, the x -intercept is

- (a) (4, 0) (b) (0, -3) (c) (-4, 0) (d) (0, 3)

Question 15

The lines $y = 2x + 3$ and $y = ax + 5$ are perpendicular if $a = \underline{\hspace{2cm}}$.

- (a) 2 (b) $\frac{1}{2}$ (c) -2 (d) $-\frac{1}{2}$