

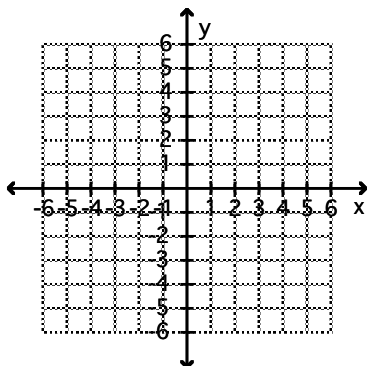
Graph of Linear Functions

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

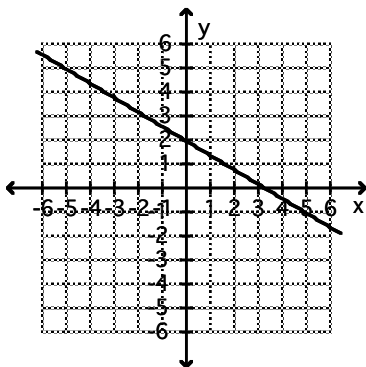
Graph the line whose equation is given.

1) $y = \frac{3}{5}x + 2$

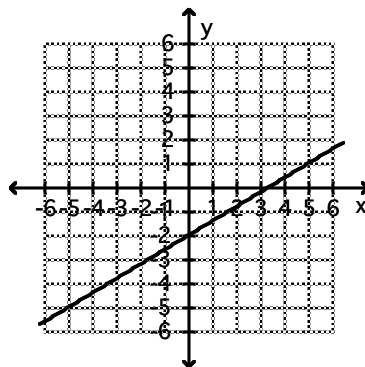
1) _____



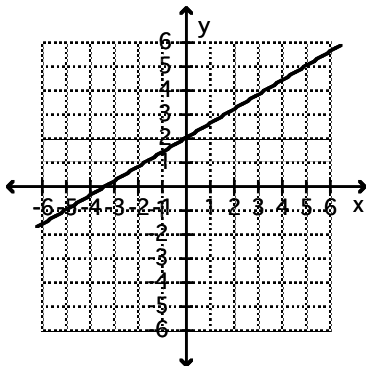
A)



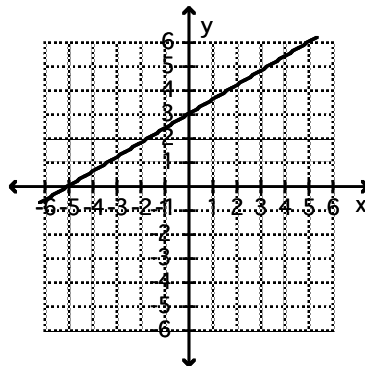
B)



C)

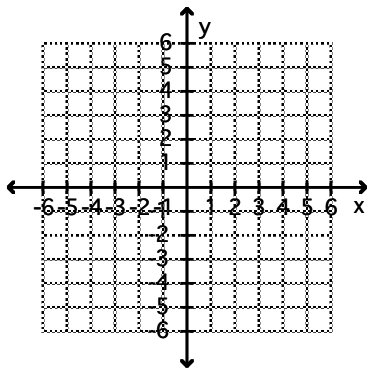


D)

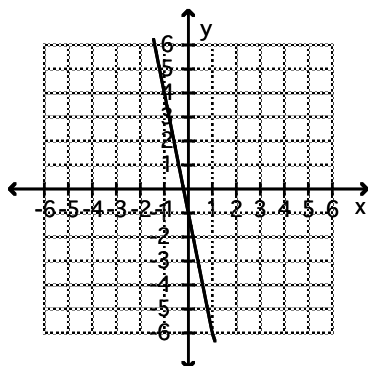


2) $y = -\frac{2}{5}x - 1$

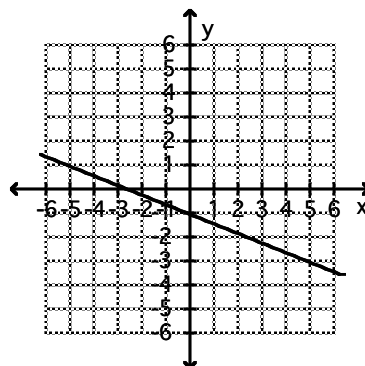
2) _____



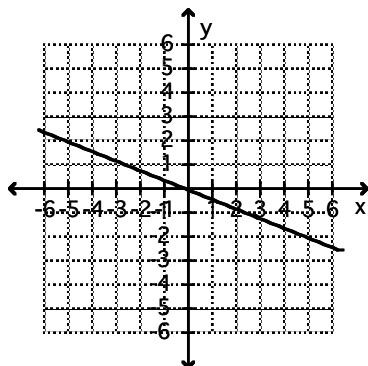
A)



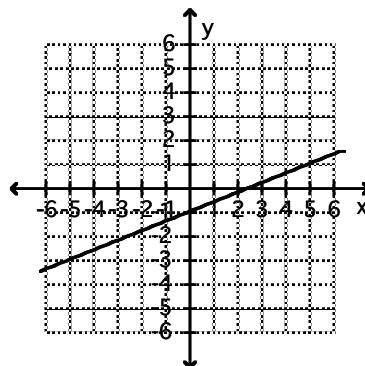
B)



C)



D)



Use the given conditions to write an equation for the line in the indicated form.

- 3) Passing through (4, -4) and parallel to the line whose equation is $y = -5x + 8$;
slope-intercept form

3) _____

A) $y = -\frac{1}{5}x - \frac{16}{5}$

B) $y = 5x - 16$

C) $y = -5x - 16$

D) $y = -5x + 16$

Find an equation for the line with the given properties.

- 4) Parallel to the line $y = -3x$; containing the point (8, 8)

4) _____

A) $y = -3x$

B) $y = -3x + 32$

C) $y - 8 = -3x - 8$

D) $y = -3x - 32$

Find an equation for the described linear function.

5) Through $(0, -5)$ and perpendicular to $y = 6x + 4$

A) $y = 6x - 5$

B) $y = \frac{1}{6}x - 5$

C) $y = -\frac{1}{6}x - 5$

D) $y = -\frac{1}{6}x + 5$

5) _____

Find an equation for the line with the given properties.

6) Perpendicular to the line $y = \frac{1}{9}x + 9$; containing the point $(5, -4)$

A) $y = -9x + 41$

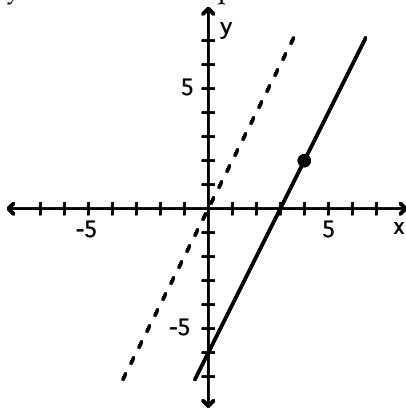
B) $y = -\frac{1}{9}x - \frac{41}{9}$

C) $y = -9x - 41$

D) $y = 9x - 41$

6) _____

7) The solid line L contains the point $(4, 2)$ and is parallel to the dotted line whose equation is $y = 2x$. Give the equation for the line L in slope-intercept form.



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

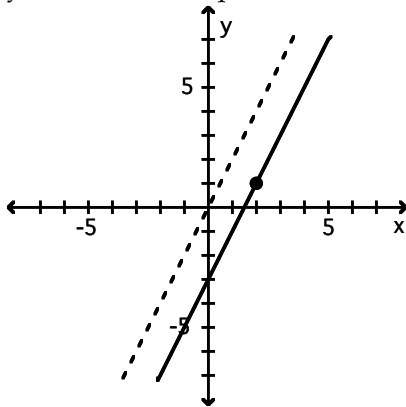
B) $y = 2x - 6$

C) $y = 2x + b$

D) $y = 2x - 2$

7) _____

8) The solid line L contains the point $(2, 1)$ and is parallel to the dotted line whose equation is $y = 2x$. Give the equation for the line L in slope-intercept form.



A) $y = 2x - 1$

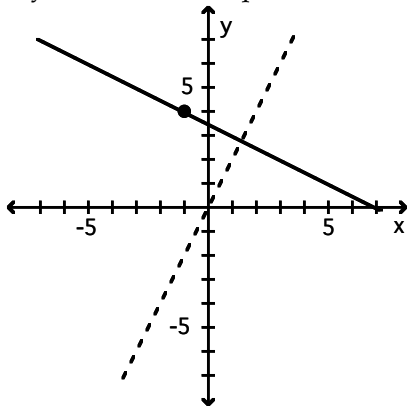
B) $y = 2x + b$

C) $y = 2x - 3$

D) $y - 1 = 2(x - 2)$

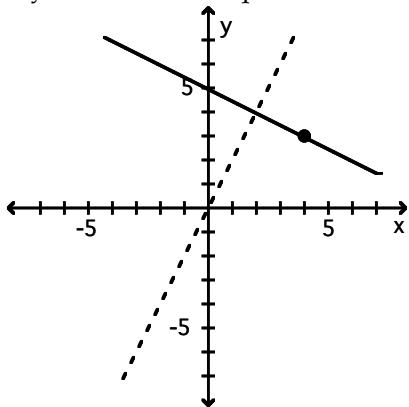
8) _____

- 9) The solid line L contains the point $(-1, 4)$ and is perpendicular to the dotted line whose equation is $y = 2x$. Give the equation of line L in slope-intercept form. 9) _____



- A) $y - 4 = -\frac{1}{2}(x + 1)$ B) $y - 4 = 2(x + 1)$
 C) $y = \frac{1}{2}x + \frac{7}{2}$ D) $y = -\frac{1}{2}x + \frac{7}{2}$

- 10) The solid line L contains the point $(4, 3)$ and is perpendicular to the dotted line whose equation is $y = 2x$. Give the equation of line L in slope-intercept form. 10) _____



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

Use the given conditions to write an equation for the line in the indicated form.

- 11) Passing through $(5, 2)$ and parallel to the line whose equation is $9x + y - 5 = 0$; slope-intercept form 11) _____

- A) $y = 9x - 47$ B) $y = -\frac{1}{9}x - \frac{47}{9}$ C) $y = -9x - 47$ D) $y = -9x + 47$

- 12) Passing through $(2, 5)$ and perpendicular to the line whose equation is $-3x + y - 6 = 0$; slope-intercept form 12) _____

- A) $y = -\frac{1}{3}x + \frac{17}{3}$ B) $y = -\frac{1}{3}x - \frac{17}{3}$ C) $y = -3x - 17$ D) $y = \frac{1}{3}x - \frac{17}{3}$

Answer Key

Testname: GRAPH OF LINEAR FUNCTIONS

- 1) C
- 2) B
- 3) D
- 4) B
- 5) C
- 6) A
- 7) B
- 8) C
- 9) D
- 10) C
- 11) D
- 12) A