

Assignment- Linear Equations

Date _____ Period _____

Write the standard form of the equation of the line described.

1) through: $(-1, 5)$, perp. to $y = \frac{1}{5}x - 3$

- A) $x + 2y = 2$ B) $5x + y = 0$
 C) $x - 2y = 0$ D) $x - 2y = -2$

2) through: $(-1, 3)$, perp. to $x = 0$

- A) $3x - 2y = 9$ B) $y = 3$
 C) $-3y = -1$ D) $3x + 2y = 9$

3) through: $(2, -4)$, perp. to $y = \frac{2}{7}x - 3$

- A) $7x + 2y = 6$ B) $2x + y = 6$
 C) $2x + y = -6$ D) $7x + 2y = -6$

4) through: $(-5, -4)$, perp. to $y = -\frac{5}{3}x - 2$

- A) $3x - 5y = 5$ B) $x - y = -5$
 C) $x + y = 2$ D) $3x - 5y = 0$

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

5) through: $(1, 1)$, perp. to $y = \frac{1}{3}x - 5$

- A) $y = 2x + 4$ B) $y = -4x + 4$
 C) $y = -3x + 4$ D) $y = 4x - 3$

6) through: $(-3, -3)$, perp. to $y = 3x - 1$

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

7) through: $(3, 1)$, perp. to $y = -\frac{3}{5}x - 1$

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

8) through: $(-1, -1)$, perp. to $y = \frac{1}{2}x - 4$

- A) $y = 5x - 2$ B) $y = -x - 2$
 C) $y = -3x - 2$ D) $y = -2x - 3$

9) through: $(-1, -2)$, parallel to $y = -3x + 4$

- A) $y = -5x - 3$ B) $y = -x - 5$
 C) $y = 3x - 5$ D) $y = -3x - 5$

10) through: $(4, -5)$, parallel to $y = -\frac{5}{2}x - 3$

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

11) through: $(1, 4)$, parallel to $y = 1$

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

12) through: $(1, 0)$, parallel to $y = -2x - 5$

- A) $y = 2x + 2$ B) $y = 5x + 2$
 C) $y = 3x + 2$ D) $y = -2x + 2$

Write the slope-intercept form of the equation of the line through the given points.

13) through: $(-5, 2)$ and $(5, -1)$

- A) $y = \frac{1}{2}x - \frac{3}{10}$
- B) $y = -\frac{3}{10}x + \frac{1}{2}$
- C) $y = \frac{1}{2}x + \frac{3}{10}$
- D) $y = \frac{3}{10}x + \frac{1}{2}$

14) through: $(-5, 2)$ and $(0, -1)$

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

15) through: $(0, -4)$ and $(-2, -1)$

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

16) through: $(1, -3)$ and $(0, -2)$

- A) $y = x - 4$
- B) $y = -4x - 2$
- C) $y = -2x - 4$
- D) $y = -x - 2$

Write the point-slope form of the equation of each line given the slope and y-intercept.

17) Slope = $-\frac{1}{3}$, y-intercept = -5

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

18) Slope = $-\frac{3}{2}$, y-intercept = 3

- A) $y = -3(x - 3)$
- B) $y - 3 = -\frac{3}{2}x$
- C) $y = -\frac{3}{8}(x - 3)$
- D) $y - 3 = 2x$

19) Slope = 3 , y-intercept = -5

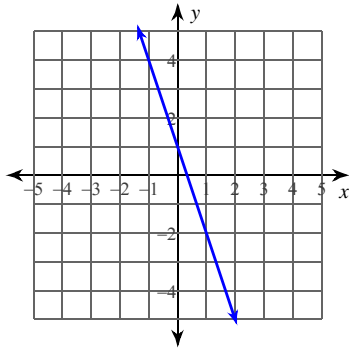
- A) $y = -\frac{2}{5}(x + 5)$
- B) $y + 5 = 3x$
- C) $y + 5 = -\frac{1}{5}x$
- D) $y + 5 = -\frac{2}{5}x$

20) Slope = $\frac{2}{3}$, y-intercept = 4

- A) $y = -12(x - 4)$
- B) $y - 4 = -3x$
- C) $y - 4 = \frac{2}{3}x$
- D) $y + 4 = -\frac{2}{3}x$

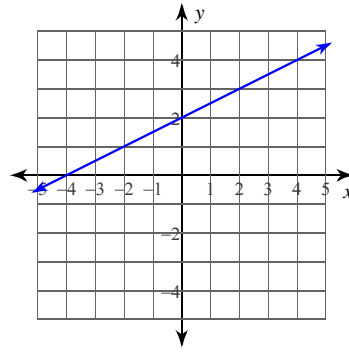
Write the standard form of the equation of each line.

21)



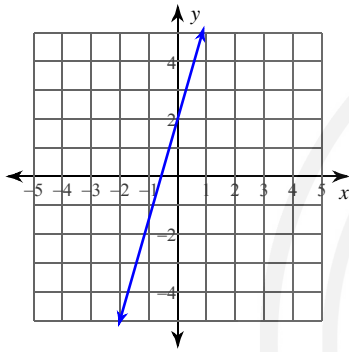
- A) $x - 3y = 1$ B) $x - 3y = -1$
 C) $3x + y = 1$ D) $x + 3y = 1$

22)



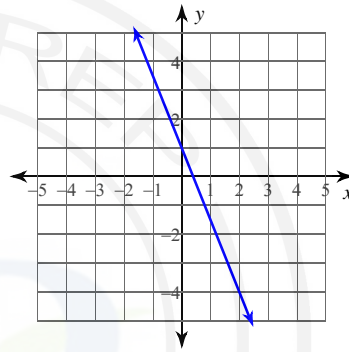
- A) $x - 2y = 4$ B) $x - 2y = -4$
 C) $x + 2y = 4$ D) $10x + y = -2$

23)



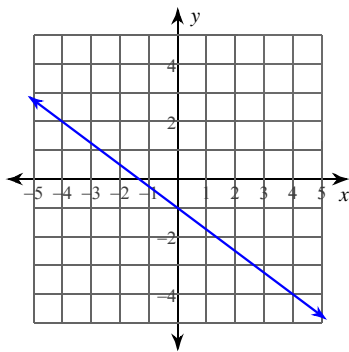
- A) $7x - 2y = -4$
 B) $7x + 2y = -4$
 C) $7x - 2y = 4$
 D) $4x + 2y = 7$

24)



- A) $x - y = -3$
 B) $2x - 5y = 10$
 C) $5x + 2y = 2$
 D) $x + y = 1$

25)



- A) $3x + 4y = -12$
 B) $3x + 4y = -4$
 C) $3x - 4y = 4$
 D) $3x - 4y = -20$

Answers to Assignment- Linear Equations (ID: 1)

1) B
5) C
9) D
13) B
17) B
21) C
25) B

2) B
6) C
10) A
14) B
18) B
22) B

3) A
7) C
11) B
15) A
19) B
23) A

4) A
8) D
12) D
16) D
20) C
24) C

