

# 5-3 Practice

Form G

Find the slope and y-intercept of the graph of each equation.

1.  $y = 3x - 5$

$m = 3; b = -5$

2.  $y = -5x + 13$

$m = -5; b = 13$

3.  $y = -x - 1$

$m = -1; b = -1$

4.  $y = -11x + 6$

$m = -11; b = 6$

5.  $y = -5$

$m = 0; b = -5$

6.  $y = \frac{1}{2}x + 6$

$m = \frac{1}{2}; b = 6$

7.  $y = -6.75x + 8.54$

$m = -6.75; b = 8.54$

8.  $y = -\frac{2}{3}x - \frac{1}{9}$

$m = -\frac{2}{3}; b = -\frac{1}{9}$

9.  $y = 2.25$

$m = 0; b = 2.25$

Write an equation of a line with the given slope  $m$  and y-intercept  $b$ .

10.  $m = -1, b = 3$

$y = -x + 3$

11.  $m = 4, b = -2$

$y = 4x - 2$

12.  $m = -5, b = -8$

$y = -5x - 8$

13.  $m = 0.25, b = 6$

$y = 0.25x + 6$

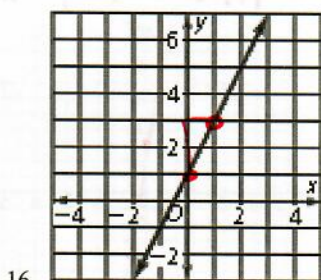
14.  $m = 0, b = -11$

$y = -11$

15.  $m = 1, b = \frac{3}{8}$

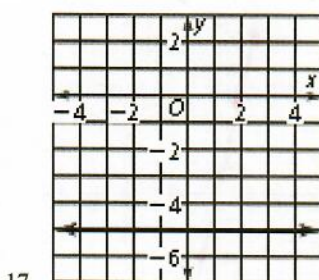
$y = 1x + \frac{3}{8}$

Write an equation in slope-intercept form of each line.



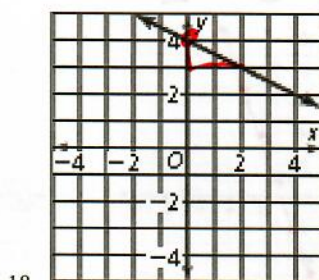
$m = \frac{2}{1} = 2; b = 1$

$y = 2x + 1$



$m = 0; b = -5$

$y = -5$



$m = -\frac{1}{2}; b = 4$

$y = -\frac{1}{2}x + 4$

Write an equation in slope-intercept form of the line that passes through the given point and slope.

19.  $m = 2; (1, 5)$

$y = mx + b$   
 $5 = (2)(1) + b$   
 $5 = 2 + b$   
 $3 = b$

$y = 2x + 3$

20.  $m = -3; (-1, 9)$

$y = mx + b$   
 $9 = (-3)(-1) + b$   
 $9 = 3 + b$   
 $6 = b$

$y = -3x + 6$

21.  $m = -1; (3, 4)$

$y = mx + b$   
 $4 = (-1)(3) + b$   
 $4 = -3 + b$   
 $7 = b$

$y = -1x + 7$

22.  $m = -5; (1, -6)$

$$y = mx + b$$

$$-6 = (-5)(1) + b$$

$$-6 = -5 + b$$

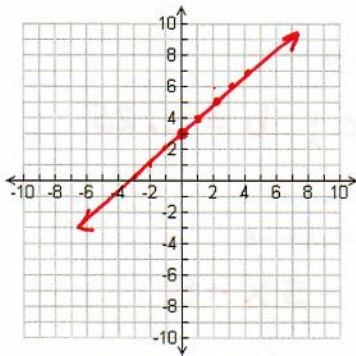
$$-1 = b$$

$$y = -5x - 1$$

Graph each equation.

25.  $y = x + 3$

$m = 1; b = 3$



23.  $m = 4; (2, 8)$

$$y = mx + b$$

$$8 = (4)(2) + b$$

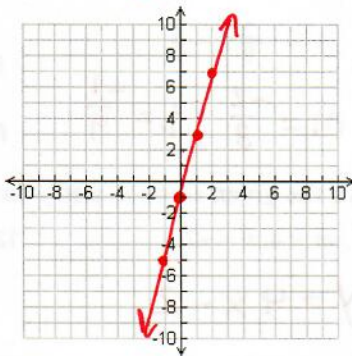
$$8 = 8 + b$$

$$0 = b$$

$$y = 4x$$

26.  $y = 4x - 1$

$m = 4; b = -1$



24.  $m = 1; (1, -2)$

$$y = mx + b$$

$$-2 = (1)(1) + b$$

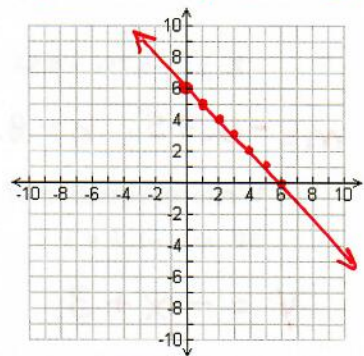
$$-2 = 1 + b$$

$$-3 = b$$

$$y = 1x - 3$$

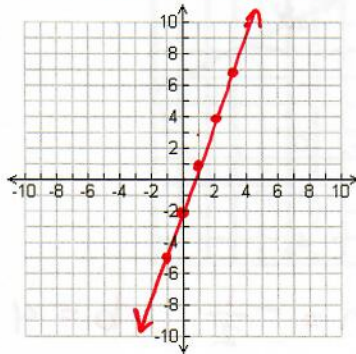
27.  $y = -x + 6$

$m = -1; b = 6$



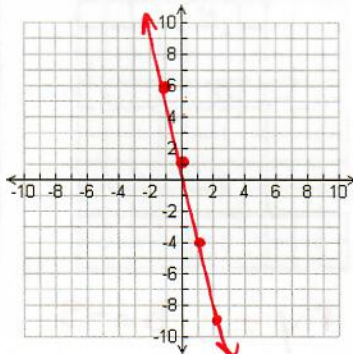
28.  $y = 3x - 2$

$m = 3; b = -2$



29.  $y = -5x + 1$

$m = -5; b = 1$



30.  $y = -7x - 4$

$m = -7; b = -4$

