

Name: _____ Date: _____ Per: _____

Write Equations in Slope-Intercept Form

5.2 Practice 3

Write the equation of the line that passes through each point with the given slope.

1. $(-5, 4)$, $m = -3$

$$y = -3x - 11$$

2. $(4, 3)$, $m = \frac{1}{2}$

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

3. $(1, -5)$, $m = -\frac{3}{2}$

$$y = -\frac{3}{2}x - \frac{7}{2}$$

Write the equation of the line that passes through each pair of points.

4. $(0, -4)$, $(5, -4)$

$$y = -4$$

5. $(-4, -4)$, $(4, 0)$

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

6. $(-2, -3)$, $(4, 5)$

$$y = \frac{4}{3}x - \frac{1}{3}$$

7. $(0, 1)$, $(5, 3)$

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

8. $(-3, 0)$, $(1, -6)$

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

9. $(1, 0)$, $(5, -1)$

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

Write an equation of the line that has each pair of intercepts.

10. x -intercept: 2, y -intercept: -5

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

11. x -intercept: 2, y -intercept: 10

$$y = -5x + 10$$

12. x -intercept: -2 , y -intercept: 1

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

13. x -intercept: -4 , y -intercept: -3

$$y = -\frac{3}{4}x - 3$$

14. DANCE LESSONS The cost for 7 dance lessons is \$82. The cost for 11 lessons is \$122. Write a linear equation to find the total cost C for l lessons. Then use the equation to find the cost of 4 lessons.

$$y = 10x + 12$$

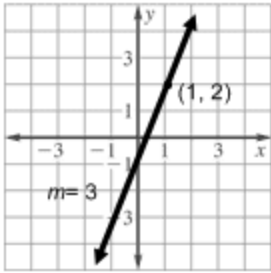
Total cost for 4 lessons is \$52

15. WEATHER It is 76°F at the 6000-foot level of a mountain, and 49°F at the 12,000-foot level of the mountain. Write a linear equation to find the temperature T at an elevation e on the mountain, where e is in the thousands of feet.

$$y = -0.0045x + 103$$

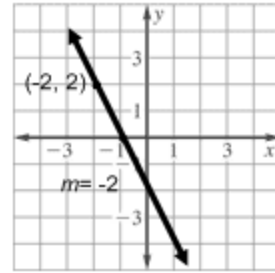
Write the equation of the line graphed.

16.



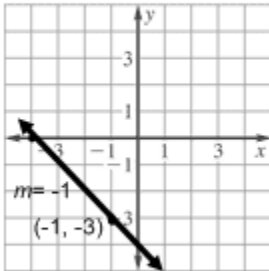
$$y = 3x - 1$$

17.



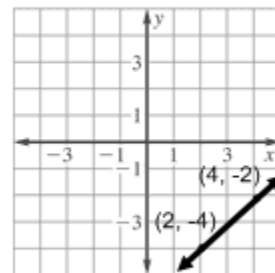
$$y = -2x - 2$$

18.



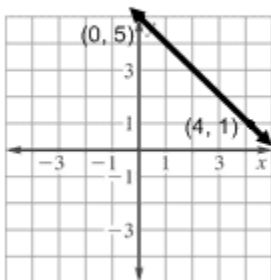
$$y = -x - 4$$

19.



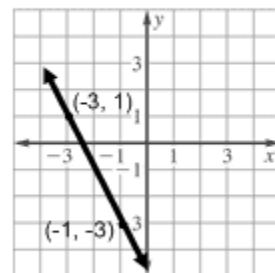
$$y = x - 6$$

20.



$$y = -x + 5$$

21.



$$y = -2x - 5$$