

Find the Equation of a Line - 3

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Write an equation of the line with the given slope, m , and y -intercept $(0, b)$.

1) $m = -7, b = 3$ 1) _____

2) $m = \frac{1}{2}, b = 4$ 2) _____

3) $m = \frac{1}{2}, b = 0$ 3) _____

4) $m = 0, b = -8$ 4) _____

5) $m = \frac{3}{2}, b = -4$ 5) _____

6) $m = -\frac{5}{2}, b = 7$ 6) _____

7) $m = -\frac{3}{7}, b = \frac{27}{7}$ 7) _____

Find an equation of the line described. Write the equation in slope-intercept form if possible.

8) Slope -3 , through $(3, 4)$ 8) _____

9) Slope $\frac{2}{3}$, through $(8, 8)$ 9) _____

10) Slope -3 , through $(-8, -6)$ 10) _____

11) Slope $-\frac{5}{9}$, through $(2, 5)$ 11) _____

Find an equation of the line with the given slope that passes through the given point. Write the equation in the form $Ax + By = C$.

12) $m = -2; (-3, -7)$ 12) _____

13) $m = 6; (7, 2)$ 13) _____

14) $m = -\frac{2}{5}; (2, 3)$ 14) _____

Find an equation of the line described. Write the equation in slope-intercept form if possible.

15) Through $(5, 41)$ and $(4, 33)$ 15) _____

16) Through $(10, -62)$ and $(3, -13)$ 16) _____

17) Through (10, -96) and (-7, 57)

17) _____

18) Through (0, 0) and $\left(6, \frac{6}{5}\right)$

18) _____

Find an equation of the line through the pair of points. Write the equation in the form $Ax + By = C$.

19) (, 3) and (0, -5)

19) _____

20) (-3, 1) and (7, 4)

20) _____

Find an equation of the line.

21) Vertical line through (-5, 4)

21) _____

22) Horizontal line through (-2, 3)

22) _____

23) Vertical line through (-4, -7)

23) _____

24) Vertical line through (-2, 7)

24) _____

25) Horizontal line through $\left(\frac{13}{10}, 0\right)$

25) _____

Answer Key

Testname: EQUOF LINE1

1) $y = -7x + 3$

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

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

4) $y = -8$

5) $y = \frac{3}{2}x - 4$

6) $y = -\frac{5}{2}x + 7$

7) $y = -\frac{3}{7}x + \frac{27}{7}$

8) $y = -3x + 13$

9) $y = \frac{2}{3}x + \frac{8}{3}$

10) $y = -3x - 30$

11) $y = -\frac{5}{9}x + \frac{55}{9}$

12) $2x + y = -13$

13) $6x - y = 40$

14) $2x + 5y = 19$

15) $y = 8x + 1$

16) $y = -7x + 8$

17) $y = -9x - 6$

18) $y = \frac{1}{5}x$

19) $-8x + 7y = -35$

20) $3x - 10y = -19$

21) $x = -5$

22) $y =$

23) $x = -4$

24) $x = -2$

25) $y = 0$