

Find the Equation of a Line - 2

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)  $m = 6, b = 9$  1) \_\_\_\_\_

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

3)  $m = \frac{5}{3}, b = 0$  3) \_\_\_\_\_

4)  $m = 0, b = 10$  4) \_\_\_\_\_

5)  $m = \frac{7}{2}, b = -12$  5) \_\_\_\_\_

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

7)  $m = -\frac{7}{4}, b = \frac{47}{4}$  7) \_\_\_\_\_

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

8) Slope 2, through  $(3, 2)$  8) \_\_\_\_\_

9) Slope  $\frac{5}{6}$ , through  $(8, 2)$  9) \_\_\_\_\_

10) Slope -3, through  $(-8, -2)$  10) \_\_\_\_\_

11) Slope  $-\frac{4}{7}$ , through  $(2, 3)$  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)  $m = -2; (-7, -3)$  12) \_\_\_\_\_

13)  $m = 4; (8, 3)$  13) \_\_\_\_\_

14)  $m = -\frac{3}{8}; (3, 5)$  14) \_\_\_\_\_

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

15) Through  $(10, 81)$  and  $(4, 33)$  15) \_\_\_\_\_

16) Through  $(4, -10)$  and  $(6, -20)$  16) \_\_\_\_\_

17) Through  $(6, -31)$  and  $(-2, 1)$

17) \_\_\_\_\_

18) Through  $(0, 0)$  and  $\left(7, \frac{7}{2}\right)$

18) \_\_\_\_\_

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

19)  $(, 7)$  and  $(0, -6)$

19) \_\_\_\_\_

20)  $(-3, 1)$  and  $(0, -4)$

20) \_\_\_\_\_

Find an equation of the line.

21) Vertical line through  $(2, 5)$

21) \_\_\_\_\_

22) Horizontal line through  $(-5, 10)$

22) \_\_\_\_\_

23) Vertical line through  $(1, 3)$

23) \_\_\_\_\_

24) Vertical line through  $(-3, -9)$

24) \_\_\_\_\_

25) Horizontal line through  $\left(\frac{6}{11}, 0\right)$

25) \_\_\_\_\_

## Answer Key

Testname: EQUOF LINE1

1)  $y = 6x + 9$

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

3)  $y = \frac{5}{3}x$

4)  $y = 10$

5)  $y = \frac{7}{2}x - 12$

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

7)  $y = -\frac{7}{4}x + \frac{47}{4}$

8)  $y = 2x - 4$

9)  $y = \frac{5}{6}x - \frac{14}{3}$

10)  $y = -3x - 26$

11)  $y = -\frac{4}{7}x + \frac{29}{7}$

12)  $2x + y = -17$

13)  $4x - y = 29$

14)  $3x + 8y = 49$

15)  $y = 8x + 1$

16)  $y = -5x + 10$

17)  $y = -4x - 7$

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

19)  $-13x + 4y = -24$

20)  $-5x - 3y = 12$

21)  $x = 2$

22)  $y =$

23)  $x = 1$

24)  $x = -3$

25)  $y = 0$