Find the Equation of a Line - 1

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) $m = 2, b = 9$ 1) _____

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

3) $m = \frac{2}{5}, b = 0$ 3) _____

4) $m = 0, b = 1$ 4) _____

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

6) $m = -\frac{4}{5}, b = 8$ 6) _____

7) $m = -\frac{7}{4}, b = \frac{51}{4}$ 7) _____

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

8) Slope 4, through (2, 3) 8) _____

9) Slope $\frac{3}{4}$, through (4, 5) 9) _____

10) Slope 3, through (-5, -4) 10) _____

11) Slope $-\frac{4}{9}$, through (3, 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) $m = -6$; (-5, -8) 12) _____

13) $m = 3$; (6, 4) 13) _____

14) $m = -\frac{2}{3}$; (5, 4) 14) _____

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

15) Through (10, 75) and (1, 12) 15) _____

16) Through (2, -10) and (3, -19) 16) _____

17) Through (7, -64) and (-3, 26) 17) _____

18) Through (0, 0) and $\left(5, \frac{5}{8}\right)$ 18) _____

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

19) (-4, 3) and (0, -8) 19) _____

20) (1, -4) and (-6, 0) 20) _____

Find an equation of the line.

21) Vertical line through (9, -6) 21) _____

22) Horizontal line through (8, -2) 22) _____

23) Vertical line through (7, 8) 23) _____

24) Vertical line through (5, 7) 24) _____

25) Horizontal line through $\left(\frac{7}{8}, 0\right)$ 25) _____

Answer Key
Testname: EQUOF LINE1

1) $y = 2x + 9$
2) $y = \frac{1}{2}x + 1$
3) $y = \frac{2}{5}x$
4) $y = 1$
5) $y = \frac{3}{2}x - 2$
6) $y = -\frac{4}{5}x + 8$
7) $y = -\frac{7}{4}x + \frac{51}{4}$
8) $y = 4x - 5$
9) $y = \frac{3}{4}x + 2$
10) $y = 3x + 11$
11) $y = -\frac{4}{9}x + \frac{13}{3}$
12) $6x + y = -38$
13) $3x - y = 14$
14) $2x + 3y = 22$
15) $y = 7x + 5$
16) $y = -9x + 8$
17) $y = -9x - 1$
18) $y = \frac{1}{8}x$
19) $-11x - 4y = 32$
20) $4x + 7y = -24$
21) $x = 9$
22) $y = -2$
23) $x = 7$
24) $x = 5$
25) $y = 0$