


Math Worksheets

Equation of Parallel or Perpendicular Lines

 Write an equation of the line that passes through the given point and is parallel to the given line.

1) $(-1, -2), x + 3y = -11$

6) $(0, 7), -5x - y = -4$

2) $(-4, 1), y = x - 5$

7) $(-2, -1), y = \frac{4}{5}x + 3$

3) $(-2, 0), 2y = 5x - 3$


8) $(-2, 5), -8x + 5y = -18$

4) $(0, 0), -3y + 4x - 14 = 0$

9) $(3, -2), y = -\frac{2}{5}x - 3$

5) $(1, 10), y + 15 = 0$

10) $(-5, -5), 6x + 15y = -30$

 Write an equation of the line that passes through the given point and is perpendicular to the given line.

11) $(-2, -6), 3x + 4y = -8$

16) $(\frac{3}{5}, \frac{2}{5}), y = -6x - 24$

12) $(-\frac{1}{3}, \frac{3}{5}), 4x - 8y = -32$

17) $(-10, 0), y = \frac{5}{3}x - 15$

13) $(2, -5), y = -5$

18) $(3, -5), y = x + 12$

14) $(7, -2), x = 7$

19) $(-3, -1), y = \frac{7}{3}x - 4$

15) $(0, -3), y = \frac{1}{2}x + 6$

20) $(0, 0), y - 8x + 6 = 0$

Answers of Worksheets

Equation of parallel or perpendicular line.

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

$$2) y = x + 5$$

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

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

$$5) y = 10$$

$$6) y = -5x + 7$$

$$7) y = \frac{4}{5}x + \frac{3}{5}$$

$$8) y = \frac{8}{5}x + \frac{41}{5}$$

$$9) y = -\frac{2}{5}x - \frac{4}{5}$$

$$10) y = -\frac{2}{5}x - 7$$

$$11) y = \frac{4}{3}x - \frac{10}{3}$$

$$12) y = -2x - \frac{1}{15}$$

$$13) x = 2$$

$$14) y = -2$$

$$15) y = -2x - 3$$

$$16) y = \frac{1}{6}x + \frac{3}{10}$$

$$17) y = -\frac{3}{5}x - 6$$

$$18) y = -x - 2$$

$$19) y = -\frac{3}{7}x - \frac{16}{7}$$

$$20) y = -\frac{1}{8}x$$