

Write the equation of a line

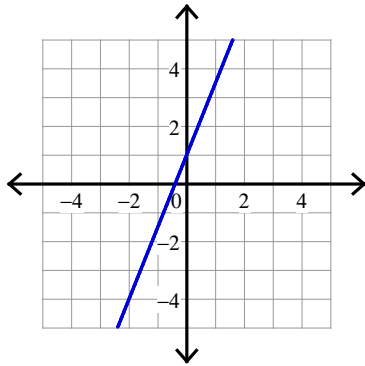
Name _____

assorted applications

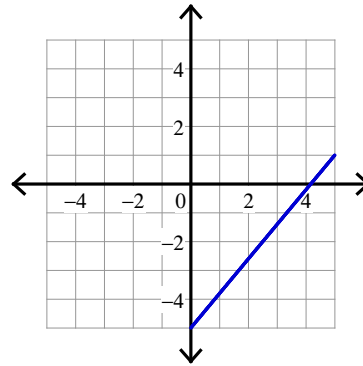
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Write the slope-intercept form of the equation of each line.

1)



2)



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

3) Slope = 3, y-intercept = -3

4) Slope = $\frac{1}{3}$, y-intercept = -4

Write the slope-intercept form of the equation of each line.

5) $5x - 8y = 7$

6) $4x - 3y = 9$

7) $y + 4 = -9(x - 1)$

8) $y + 5 = \frac{5}{2}(x + 4)$

9) $0 = -x + \frac{4}{3}y + \frac{16}{3}$

10) $-6 = x - 2y$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

11) through: (2, 4), slope = 1

12) through: (-2, -3), slope = $-\frac{7}{2}$

Write the slope-intercept form of the equation of the line through the given points.

13) through: (4, -5) and (0, -1)

14) through: (1, 5) and (2, 5)

Write the slope-intercept form of the equation of the line described.

15) through: (-4, -3), parallel to $y = \frac{7}{4}x + 2$

16) through: (-2, -2), parallel to $y = \frac{1}{2}x$

17) through: (-4, -1), perp. to $x = 0$

18) through: (-5, -5), perp. to $y = -\frac{5}{7}x - 5$

Write the standard form of the equation of each line given the slope and y-intercept.

19) Slope = -1, y-intercept = -4

20) Slope = 7, y-intercept = -4

Write the standard form of the equation of each line.

21) $y - 3 = \frac{7}{4}(x - 4)$

22) $y + 3 = -(x - 3)$

Write the standard form of the equation of the line through the given point with the given slope.

23) through: (-4, -3), slope = $-\frac{1}{9}$

24) through: (2, 1), slope = 1

Answers to assorted applications

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

$$5) y = \frac{5}{8}x - \frac{7}{8}$$

$$9) y = \frac{3}{4}x - 4$$

$$13) y = -x - 1$$

$$17) y = -1$$

$$21) 7x - 4y = 16$$

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

$$6) y = \frac{4}{3}x - 3$$

$$10) y = \frac{1}{2}x + 3$$

$$14) y = 5$$

$$18) y = \frac{7}{5}x + 2$$

$$22) x + y = 0$$

$$3) y = 3x - 3$$

$$7) y = -9x + 5$$

$$11) y = x + 2$$

$$15) y = \frac{7}{4}x + 4$$

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

$$23) x + 9y = -31$$

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

$$8) y = \frac{5}{2}x + 5$$

$$12) y = -\frac{7}{2}x - 10$$

$$16) y = \frac{1}{2}x - 1$$

$$20) 7x - y = 4$$

$$24) x - y = 1$$