

Assignment 1: Writing Equations of Lines

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

1) Slope = 3, y-intercept = 4

2) Slope = $-\frac{2}{3}$, y-intercept = 2

3) Slope = $\frac{7}{2}$, y-intercept = -4

4) Slope = $\frac{7}{5}$, y-intercept = -5

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

5) through: (3, 4), slope = 0

6) through: (3, -2), slope = $-\frac{5}{3}$

7) through: (-3, 0), slope = $\frac{4}{3}$

8) through: (5, -3), slope = $\frac{2}{5}$

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

9) through: (0, -4) and (3, -1)

10) through: (4, -5) and (2, 1)

11) through: (-3, 3) and (3, -3)

12) through: (-4, -4) and (-2, 4)

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

13) through: (-3, -4), parallel to $y = x + 2$

14) through: (1, -2), parallel to $y = 2$

15) through: (4, 2), perp. to $y = -x - 2$

16) through: (2, 2), perp. to $y = -2x + 1$

Assignment 1: Writing Equations of Lines

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

1) Slope = 3, y-intercept = 4

$$y = 3x + 4$$

2) Slope = $-\frac{2}{3}$, y-intercept = 2 $y = -\frac{2}{3}x + 2$

3) Slope = $\frac{7}{2}$, y-intercept = -4 $y = \frac{7}{2}x - 4$

4) Slope = $\frac{7}{5}$, y-intercept = -5 $y = \frac{7}{5}x - 5$

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

5) through: (3, 4), slope = 0

$$y = 4$$

6) through: (3, -2), slope = $-\frac{5}{3}$ $y = -\frac{5}{3}x + 3$

7) through: (-3, 0), slope = $\frac{4}{3}$ $y = \frac{4}{3}x + 4$

8) through: (5, -3), slope = $\frac{2}{5}$ $y = \frac{2}{5}x - 5$

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

9) through: (0, -4) and (3, -1)

$$y = x - 4$$

10) through: (4, -5) and (2, 1)

$$y = -3x + 7$$

11) through: (-3, 3) and (3, -3)

$$y = -x$$

12) through: (-4, -4) and (-2, 4)

$$y = 4x + 12$$

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

13) through: (-3, -4), parallel to $y = x + 2$

$$y = x - 1$$

14) through: (1, -2), parallel to $y = 2$

$$y = -2$$

15) through: (4, 2), perp. to $y = -x - 2$

$$y = x - 2$$

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