

Assignment

Write the standard form of the equation of the line through the given points.

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

$x + 4y = 0$

2) through: (-5, 5) and (0, -1)

$6x + 5y = -5$

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

3) through: (-5, -2) and (3, 1) $y = \frac{3}{8}x - \frac{1}{8}$

4) through: (5, -5) and (-1, 2) $y = -\frac{7}{6}x + \frac{5}{6}$

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

5) through: (2, 3) and (-5, 0) $y - 3 = \frac{3}{7}(x - 2)$

6) through: (-5, 2) and (4, -1) $y - 2 = -\frac{1}{3}(x + 5)$

Convert the equation of each line to slope-intercept form.

7) $7x + 2y = 12$ $y = -\frac{7}{2}x + 6$

8) $8x - 3y = 0$ $y = \frac{8}{3}x$

9) $y = \frac{2}{9}(x - 5)$ $y = \frac{2}{9}x - \frac{10}{9}$

10) $0 = x - 4$
 $x = 4$

Convert the equation of each line to standard form.

11) $y = -x - 2$
 $x + y = -2$

12) $y = -\frac{2}{5}x$
 $2x + 5y = 0$

13) $y + 2 = -(x - 3)$
 $x + y = 1$

14) $y - 3 = \frac{7}{4}(x - 4)$
 $7x - 4y = 16$

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

15) Slope = $\frac{5}{2}$, y-intercept = -5
 $5x - 2y = 10$

16) Slope = 0, y-intercept = -4
 $y = -4$

Write the standard form of the equation of each line described.

17) through: (3, -4), parallel to $y = -\frac{1}{8}x - 4$
 $x + 8y = -29$

18) through: (-4, -1), parallel to $y = \frac{1}{4}x + 3$
 $x - 4y = 0$

19) through: (4, -2), perp. to $y = -\frac{1}{2}x - 1$
 $2x - y = 10$

20) through: (3, -5), perp. to $y = \frac{3}{7}x + 3$
 $7x + 3y = 6$