

Parallel and Perpendicular Lines Day 2

Date _____ Period _____

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

1) through: $(-4, 5)$, parallel to $y = -\frac{5}{4}x - 5$

2) through: $(5, 0)$, parallel to $y = -\frac{1}{3}x + 1$

3) through: $(5, -3)$, perp. to $y = \frac{1}{3}x + 1$

4) through: $(-5, 5)$, perp. to $y = 4x$

5) through: $(3, 5)$, parallel to $y = 3x + 5$

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

7) through: $(1, 1)$, perp. to $y = -\frac{1}{5}x + 4$

8) through: $(-2, 4)$, perp. to $y = \frac{2}{7}x + 5$

9) through: $(2, -1)$, parallel to $y = 5$

10) through: $(5, 4)$, parallel to $y = \frac{6}{5}x + 4$

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

11) through: $(-1, -4)$, slope = 4

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

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

13) Slope = 1, y-intercept = -1

14) Slope = $-\frac{1}{2}$, y-intercept = 0

Solve each proportion.

15) $-\frac{6}{b} = \frac{8}{7}$

16) $-\frac{6}{2} = \frac{2}{x}$

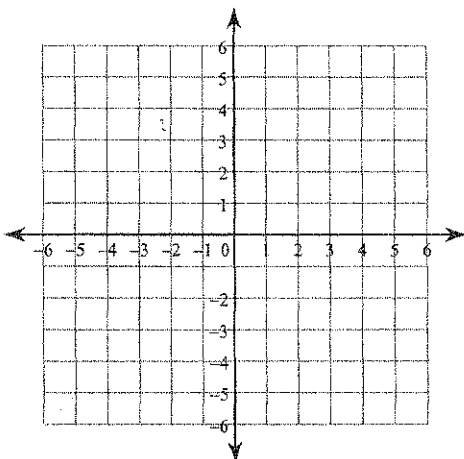
Write the slope-intercept form of the equation of the line described.

17) through: (1, 1), parallel to $y = 5x + 3$

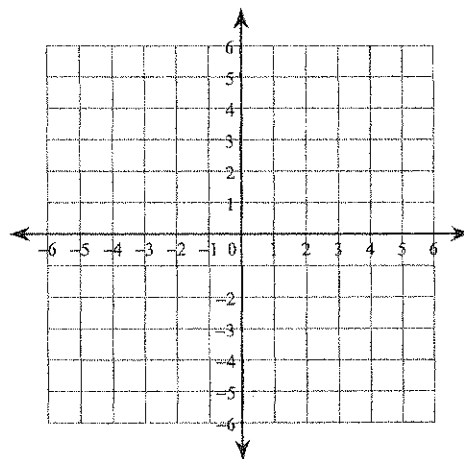
18) through: (-3, -4), parallel to $y = \frac{1}{3}x + 2$

Sketch the graph of each line.

19) $x - y = -4$



20) $x - 2y = -4$



Solve each equation.

21) $7(4m - 2) = -126$

22) $120 = 8 - 8x$

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

23) through: (-1, 1), perp. to $y = -\frac{1}{3}x + 2$

24) through: (2, 4), perp. to $x = 0$

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

26) through: (4, 5), perp. to $y = -\frac{2}{5}x + 3$