

Parallel and Perpendicular Lines Day 1

Date _____ Period _____

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

1) through: $(-4, -5)$, parallel to $y = \frac{5}{2}x + 1$

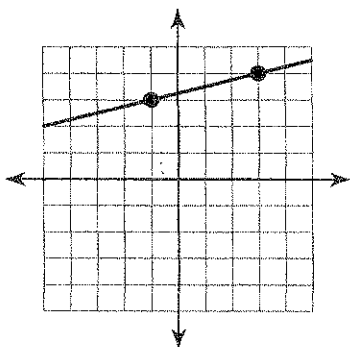
2) through: $(3, 4)$, parallel to $y = x - 2$

3) through: $(2, -5)$, perp. to $y = \frac{2}{7}x + 1$

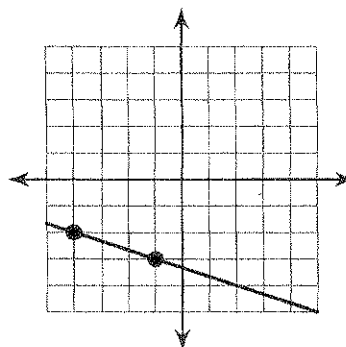
4) through: $(-1, 4)$, perp. to $y = 2x - 1$

Find the slope of each line.

5)



6)



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

7) through: $(-3, 3)$, parallel to $y = -8x + 4$

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

9) through: $(-3, 5)$, perp. to $y = \frac{1}{9}x + 3$

10) through: $(4, -1)$, perp. to $y = \frac{4}{5}x + 3$

11) through: $(-5, 0)$, parallel to $y = -\frac{4}{5}x + 2$

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

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

13) through: $(-3, -1)$, slope = -5

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

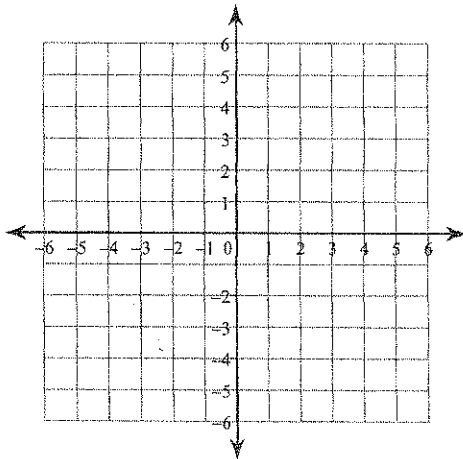
Write the slope-intercept form of the equation of each line given the slope and y-intercept.

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

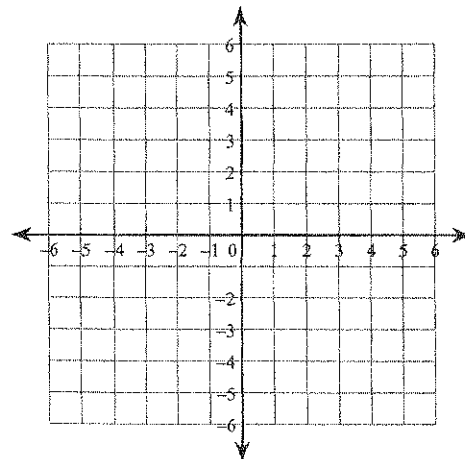
16) Slope = $\frac{7}{3}$, y-intercept = -5

Sketch the graph of each line.

17) $x + 2y = -10$



18) $2x + 5y = 0$



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

19) through: $(-2, -5)$, perp. to $y = -\frac{1}{5}x + 5$

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

21) through: $(-5, -3)$, perp. to $y = 5x + 5$

22) through: $(-3, 1)$, perp. to $y = -\frac{3}{4}x - 5$

23) through: $(1, -4)$, parallel to $y = -4x + 3$

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