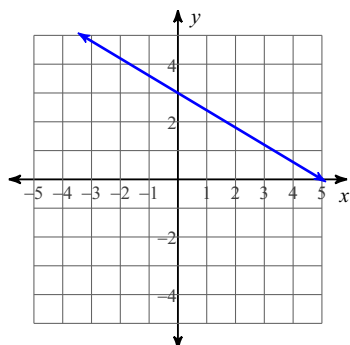


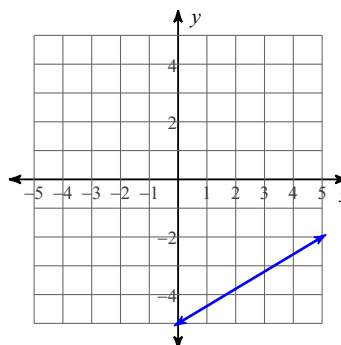
# Geometry - Homework 14

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

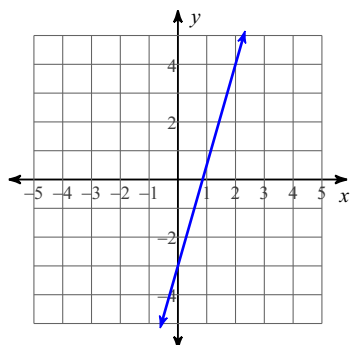
1)



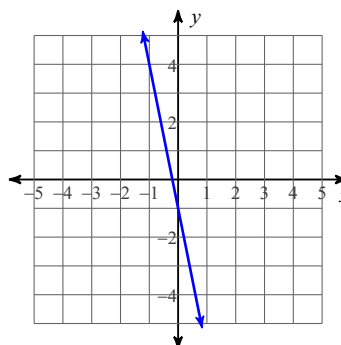
2)



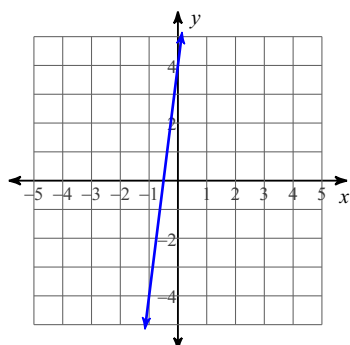
3)



4)



5)



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

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

7) Slope =  $1$ , y-intercept =  $-4$

8) Slope =  $-\frac{5}{2}$ , y-intercept =  $3$

9) Slope =  $\frac{1}{5}$ , y-intercept =  $-4$

10) Slope =  $4$ , y-intercept =  $3$

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

11)  $10x + 7y = 49$

12)  $x - 8y = 16$

13)  $11x - y = -6$

14)  $3x - 4y = -16$

15)  $4x + 3y = 6$

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

16) through:  $(-3, 1)$ , slope  $= -\frac{2}{3}$

17) through:  $(2, 2)$ , slope  $= \frac{3}{2}$

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

19) through:  $(5, -1)$ , slope  $= -\frac{2}{3}$

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

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

21) through:  $(-4, 3)$  and  $(-1, -5)$

22) through:  $(-1, 5)$  and  $(-4, -3)$

23) through:  $(-1, -3)$  and  $(5, 5)$

24) through:  $(2, 5)$  and  $(-5, -2)$

25) through:  $(3, -3)$  and  $(-3, 0)$

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

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

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

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

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

30) through:  $(3, -3)$ , parallel to  $y = -\frac{7}{3}x - 5$

31) through:  $(5, 3)$ , perp. to  $y = -\frac{5}{8}x$

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

33) through:  $(2, -1)$ , perp. to  $y = -5x - 2$

34) through:  $(4, 4)$ , perp. to  $y = -\frac{2}{3}x - 1$

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

## Answers to Geometry - Homework 14

$$1) y = -\frac{3}{5}x + 3$$

$$9) y = \frac{1}{5}x - 4$$

$$17) y = \frac{3}{2}x - 1$$

$$25) y = -\frac{1}{2}x - \frac{3}{2}$$

$$33) y = \frac{1}{5}x - \frac{7}{5}$$

$$3) y = \frac{7}{2}x - 3$$

$$11) y = -\frac{10}{7}x + 7$$

$$19) y = -\frac{2}{3}x + \frac{7}{3}$$

$$27) y = -\frac{5}{2}x - 3$$

$$35) y = \frac{7}{3}x + 2$$

$$5) y = 8x + 4$$

$$13) y = 11x + 6$$

$$21) y = -\frac{8}{3}x - \frac{23}{3}$$

$$29) y = -4x + 1$$

$$7) y = x - 4$$

$$15) y = -\frac{4}{3}x + 2$$

$$23) y = \frac{4}{3}x - \frac{5}{3}$$

$$31) y = \frac{8}{5}x - 5$$