**1.** **Find the slope of the line containing the given pair of points. If the slope is undefined, state so.**

(1, 2) and (9, 12)

a. 4/3

b. 4/5

c. 5/4

d. 3/4

2, **Find the intercepts for the following equation.**
y = 12

a. (12, 0)

b. (0, 12)

c. (0, -12), (-12, 0)

d. (0, 12), (12, 0)

3. Determine the x- and y-intercepts of the given equation. Show your work. Then plot the intercepts, and graph the line.

y = x - 7

**4.** Determine the x- and y-intercepts (if any) of the given equation. Show your work. Then plot the intercepts, and graph the line.
y = -5x+ 15

**5.** Draw a **line that has the given slope and y-intercept.**
Slope - $\frac{1}{3}$ ; y-intercept (0, 6)

**6. Show the slope and the y-intercept of the line.**

4x + 7y = 51

**a.** -4/7; (0, 51/7)

b. 1 ¾, (0, 7/51)

c. 4/7 ;( 0, 51/7)

d. -1 ¾ ;( 0, 7/51)

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

Determine the x- and y-intercepts (if any) of the given equation. Show your work. Then plot the intercepts, and show a graph.

**8.** m = 3; (4, -9)

**Find an equation in point-slope form of the line having the specified slope and containing the point indicated.**

**a.** y + 9 = 3(x - 4)

**b. y - 9 =** 3(x + 4)

**c.** x - 9 = -3(y + 4)

**d.** x + 9 = -3(y - 4)

**9. Find an equation of the line meeting the specified conditions. Write your answer in slope-intercept form.**

Containing the point (0, 4) and parallel to y = 7x – 6

**a.** y = 7x - 4

**b.** y = -7x + 4

**c.** y = - $\frac{1}{7}$ x + 4

**d.** y = 7x + 4

**Submit a graph of the following the line**
the line with slope 1/4 that passes through the point (0, 3)

**11.** **Solve the problem.**

A gas station sells 4820 gallons of regular unleaded gasoline on a day when they charge $1.35 per gallon, and they sell 3880 gallons on a day when they charge $1.40 per gallon. Find an equation for the line whose graph depicts this data.

a. y = -18,800x + 30,178.2

b. y = -18,800x + 30,183.8

c. y = -18,800x + 30,216

d. y = -18,800x + 30,200

**12.** **Find an equation of the line containing the given pair of points. Write your final answer in slope-intercept form.**

(10, 4) and (-3, 4)

**a.** y = 4

b. y = - $\frac{1}{13}$x

c. y = 0

d. y = 13x

13.  **Solve using either elimination or substitution. Show your work. If the system has either no solution or an infinite number of solutions, state this.**

7x - 9y = 114
5x + 4y = -2