Math 10

<u>Lesson 4–3</u> Answers

Lesson Questions
Question 1
Draw the following lines:

a) Plot the point K(0, –4) and then go 3 up and 5 right to find the second point. Draw a line between the two points. Remember to add arrows to the line to indicate that it continues on in both directions.

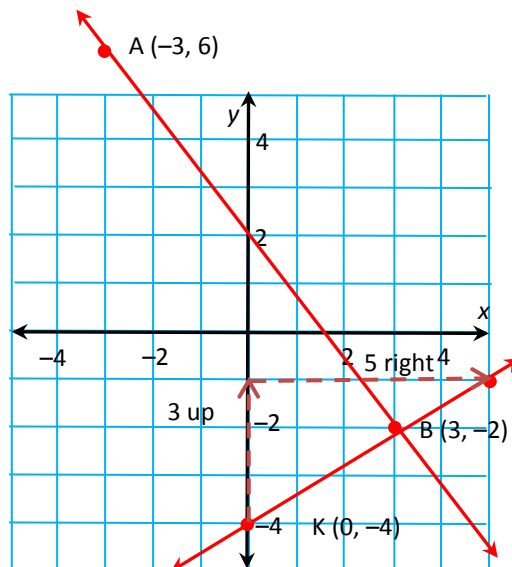b) Calculate two points. Since the denominator in the slope is 3, I chose x = –3 and 3.

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

$$y = -\frac{4}{\cancel{3}}(\cancel{-3}) + 2 \qquad y = -\frac{4}{\cancel{3}}(\cancel{3}) + 2$$
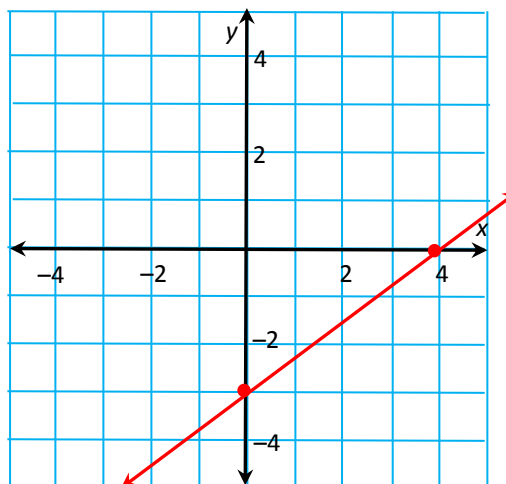
$$y = 4 + 2 \qquad\qquad y = -4 + 2$$

$$y = 6 \qquad\qquad\quad y = -2$$

$$A(-3, 6) \qquad\qquad B(3, -2)$$

Question 2

x-intercept, set $y = 0$

$$3x - 4y = 12$$

$$3x - 4(0) = 12$$

$$3x = 12$$

$$x - \text{intercept} = 4$$

y-intercept, set $x = 0$

$$3x - 4y = 12$$

$$3(0) - 4y = 12$$

$$-4y = 12$$

$$y - \text{intercept} = -3$$

Assignment

1.

a)
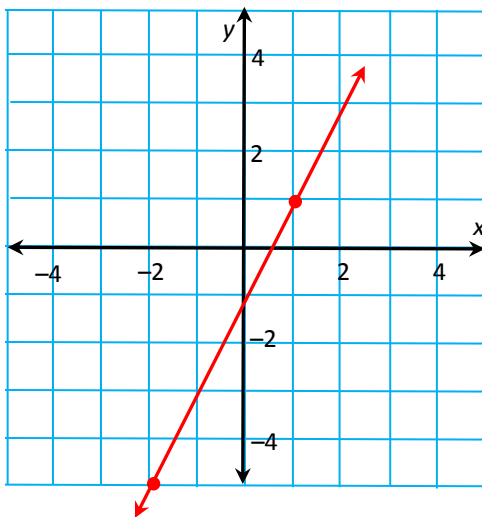
b)
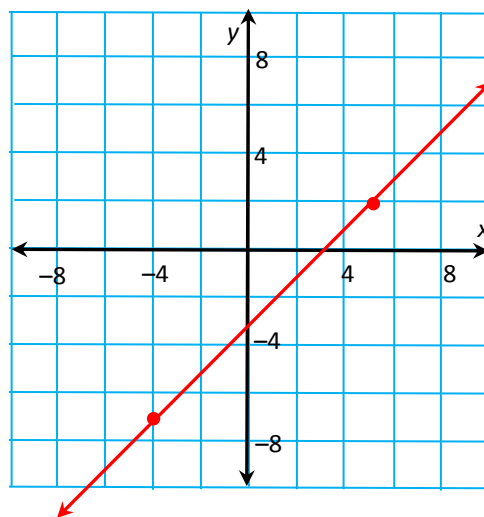
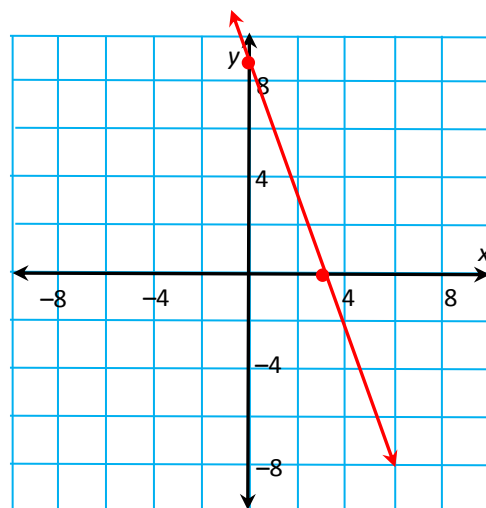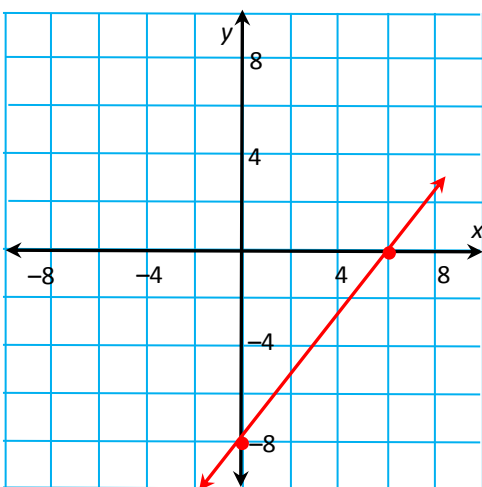c)
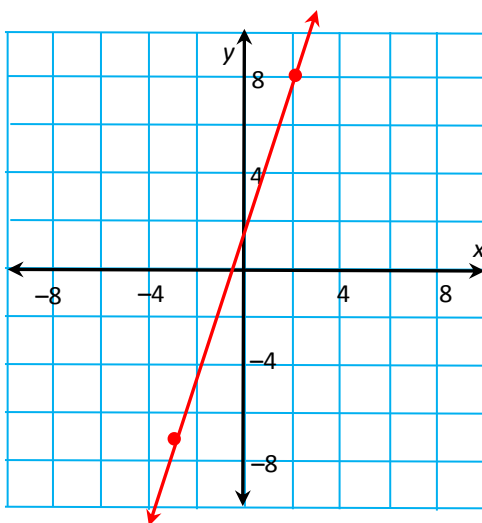
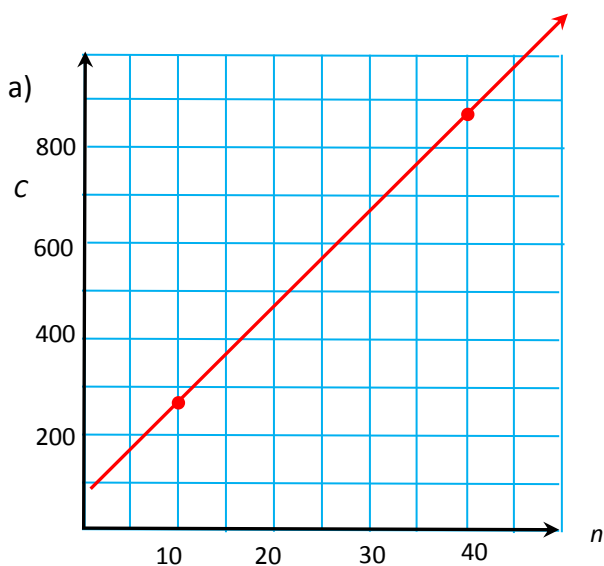d)
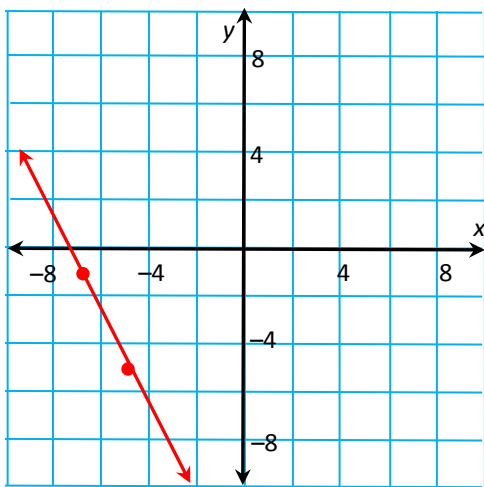
2. a)
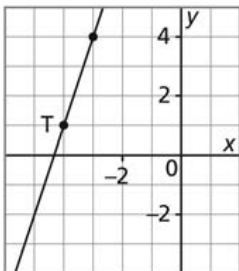
b)
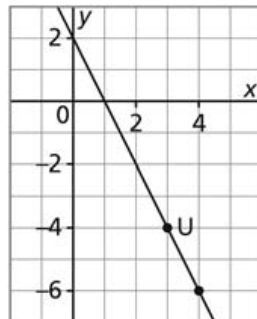
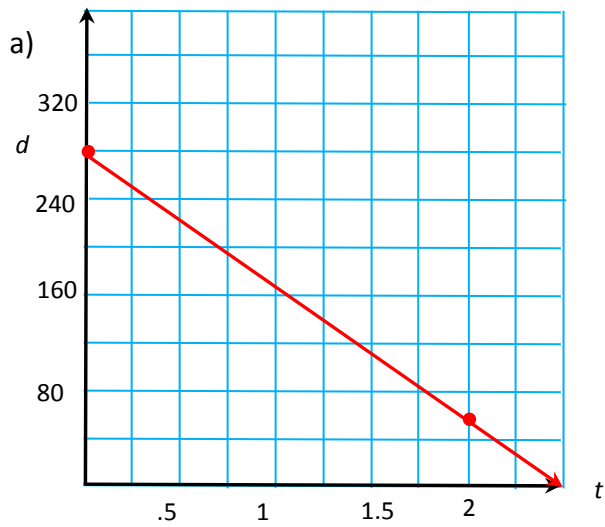c)
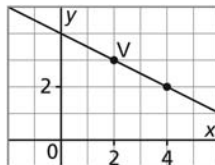
d)
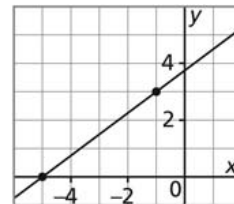
3.

a)
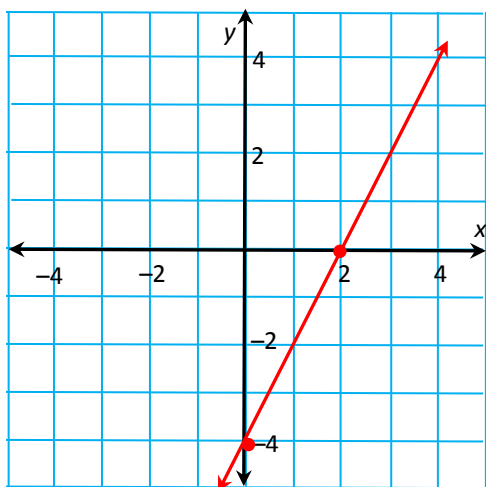
b)
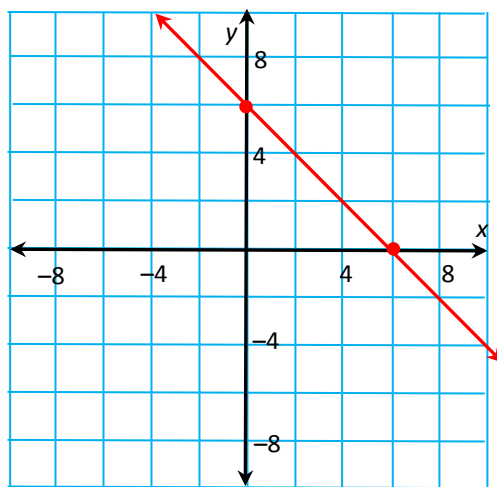
c)

d)

4.

a)

b)   The cost of 35 copies is approximately $7.80.

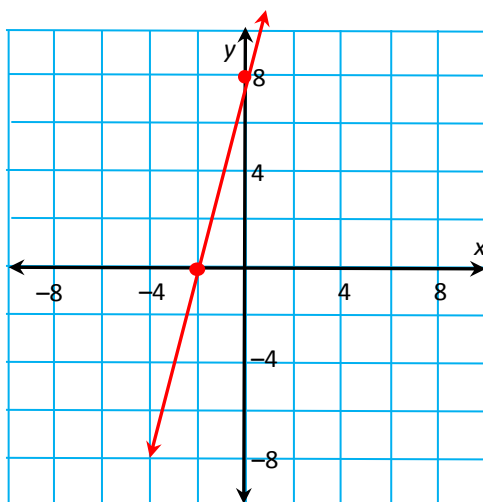c)   Approximately 46 copies can be made for $10.
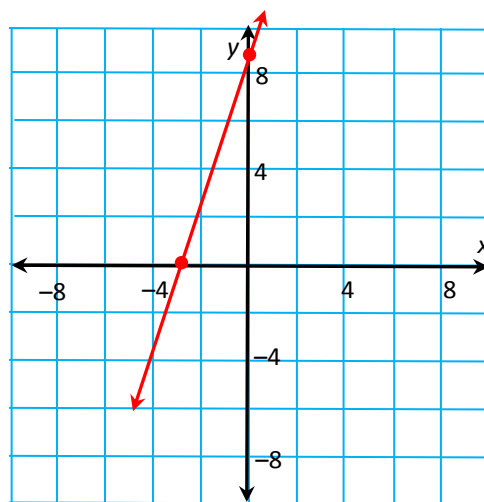
5.

a)

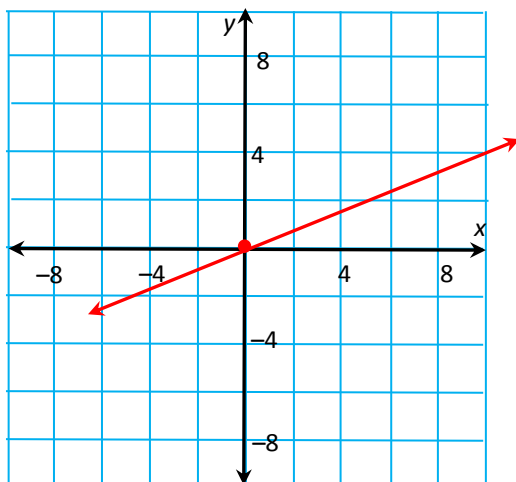b)   After 2 h, the distance from Calgary is approximately 60 km and from Edmonton
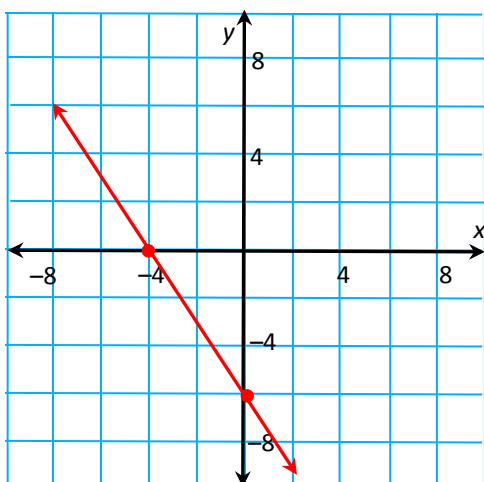   220 km.

6.

a)

b)

c)
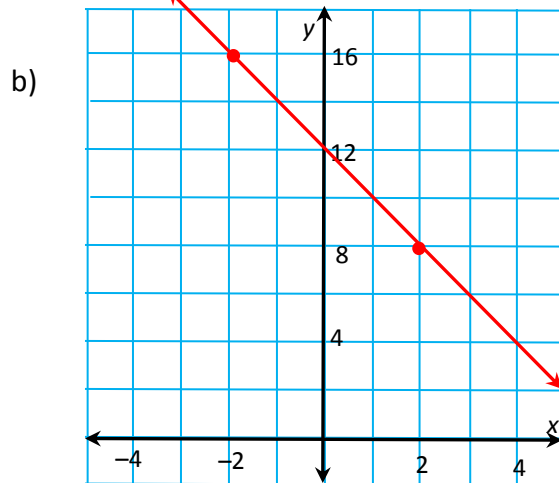

d)

7.

a)

first (x)	second (y)
−2	16
−1	14
0	12
1	10
2	8

b)

c) coordinates (3, 6)

$3 \cdot 2 + 6 = 12$

c) coordinates (−2, 12)

$-2 \cdot 2 + 12 \neq 12$