

# *homework check:* none

# *note:* Prerequisite Skills

Several of the previous skills we have already reviewed are necessary in this unit. For example,

- a) Simplify, then find the value of  $x$  when  $y = -3$

$$-2x + 3y - 7 - 5x + 2y + 5 = 11$$

$$-2x - 5x + 3y + 2y - 7 + 5 = 11$$

$$-7x + 5y - 2 = 11$$

$$-7x + 5(-3) - 2 = 11$$

$$-7x - 15 - 2 = 11$$

$$-7x - 15 = 11$$

$$-7x = 11 + 17$$

$$-7x = 28$$

$$\frac{-7x}{-7} = \frac{28}{-7}$$

$$x = -4$$

- b) Translate the given words into an algebraic equation.

- i) Bob makes \$12 an hour. Last week he made \$65.

Therefore, the equation is  $12h = 65$

- ii) Lauren delivers papers. She is paid \$12 for each route plus 0.25 cents per paper.

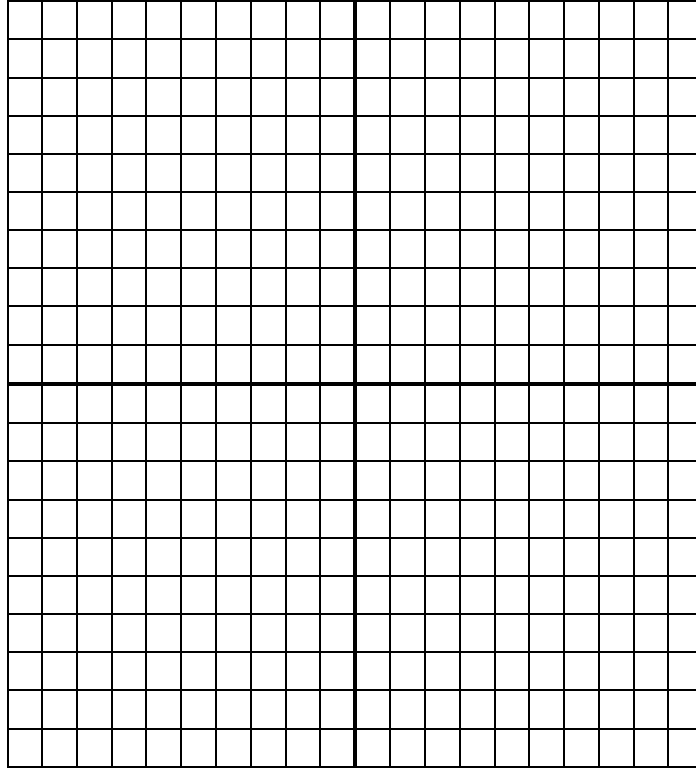
Last week she made \$250.

Therefore, the equation is  $12 + 0.25p = 250$

c) Graph the following relations.

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

ii)  $2x + y - 3 = 0$



**✚ homework assignment: Lesson 5 – 1: Prerequisite skills**

**Lesson 5 – 1: Prerequisite Skills**

**1. Simplify by collecting like terms.**

a)  $2x + 5 - 4x - 9 =$

b)  $3x + 4 + 2x - 1 =$

c)  $11y - 5 - 2y + 8 =$

d)  $7x - 3x + 5 - 11 =$

**2. Rearrange each equation to isolate y.**

a)  $-3x + 8y = 11$

b)  $3x - y = 4$

c)  $4x - 2y = 9$

d)  $5x - 2y - 6 = 0$

**3. For each equation, find the value of y when  $x = 3$ .**

a)  $2x + y = 8$

b)  $y = 3x - 1$

c)  $x - y = 9$

d)  $3x - 2y = 16$

**4. For each equation, find the value of x when  $y = -2$ .**

a)  $2x - 3y = 1$

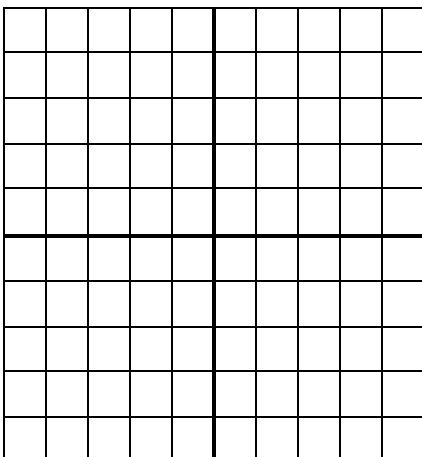
b)  $4y = 2x + 7$

c)  $3x - 2y = 16$

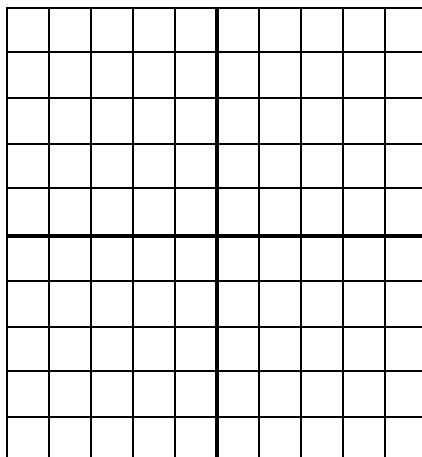
d)  $2x - 2y = 9$

**5. Graph each relation.**

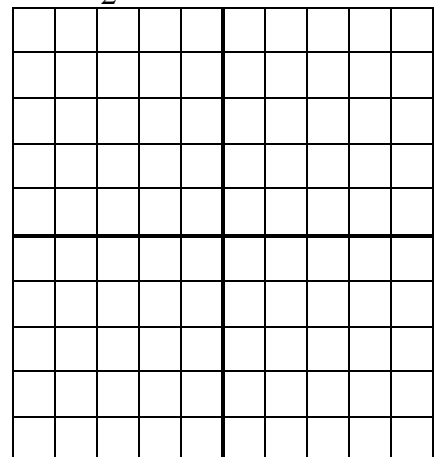
a)  $y = 4x - 3$



b)  $y = -x + 2$



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

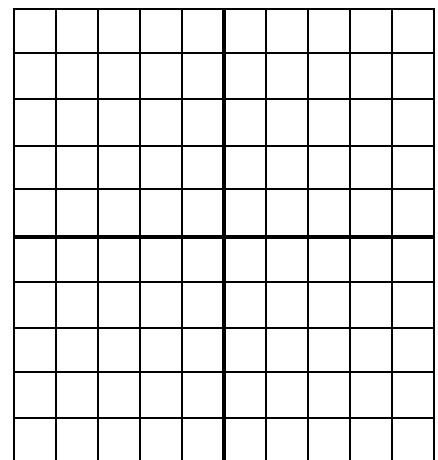
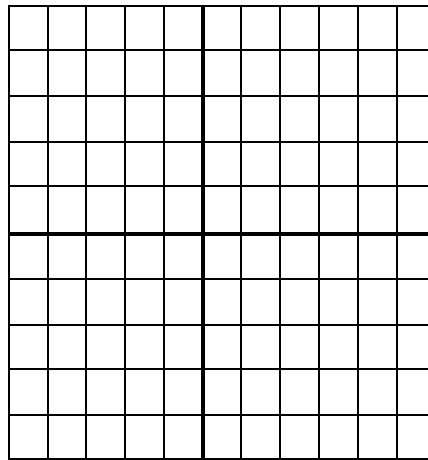
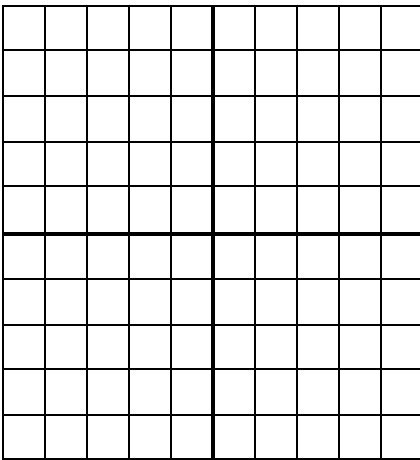


**6. Rearrange each equation from standard form into y-intercept form then graph on the grid provided.**

a)  $2x + y - 4 = 0$

b)  $3x + y + 3 = 0$

c)  $5x - 2y - 10 = 0$



**7. Write an equation to represent each situation.**

a) The cost to have flyers delivered is \$50 plus \$0.10 per flyer. Callum spends a total of \$400 to have flyers delivered.

b) Ton earns \$8.50/h. Last week, he earned \$52.00.

c) The total mass of a metal storage drum is 90 kg. the mass of an empty drum is 18 kg and the mass of liquid stored in the drum is 2.3 kg/L.