Name_____ Date_____ Hour_____

Worksheet 4.2 – Graphing Linear Equations – Textbook pages 210-213

LEVEL 1

Check if the point is a solution to the equation. Show your work.

1) $5x - 3y = 7$ (5, 6)

2) $y = 5$ (5, 2)

3) $4y - 6x = 0$ (–2, –3)

Find two different ordered pairs that are solutions to the equation.

4) $y = 4x + 6$

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

6) $y = 3$

LEVEL 2

Rewrite the equation in function form. Show your work.

7) $-7x + y = 1$

8) $-6x - 9y = 0$

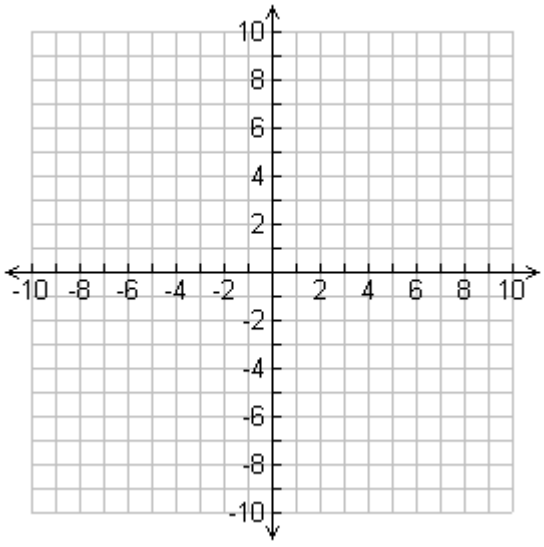
9) $-4x - 2y = -1$

LEVEL 3

Use a table of values to graph the equation.

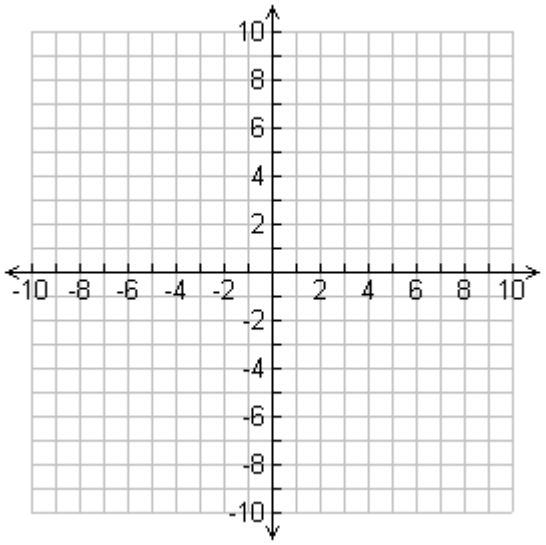
10)

x	$y = 2x + 3$	y	(x, y)



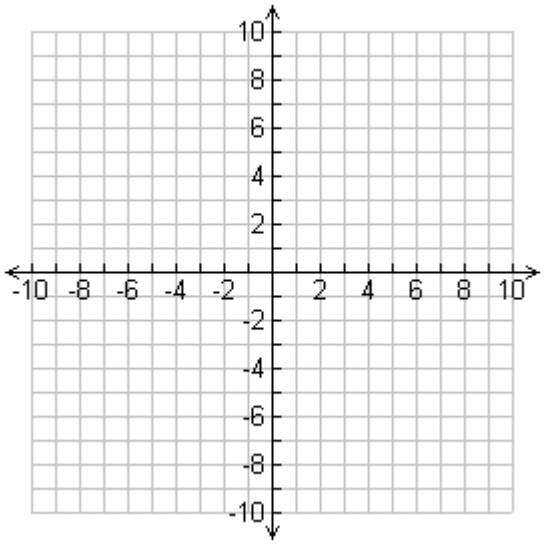
11)

x	$y = \frac{1}{2}x + 4$	y	(x, y)



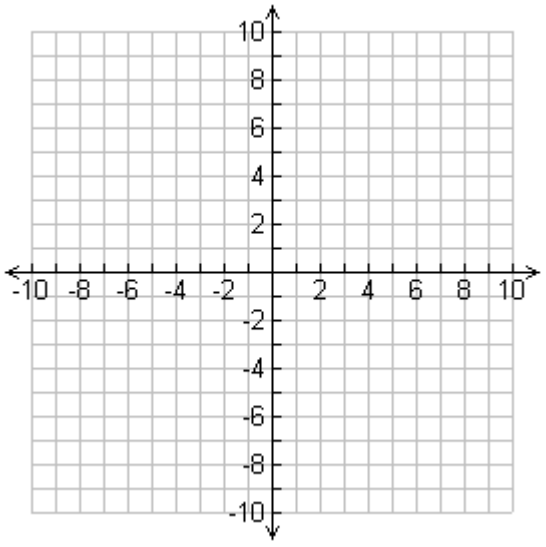
12)

x	$y = \frac{1}{3}x - 3$	y	(x, y)



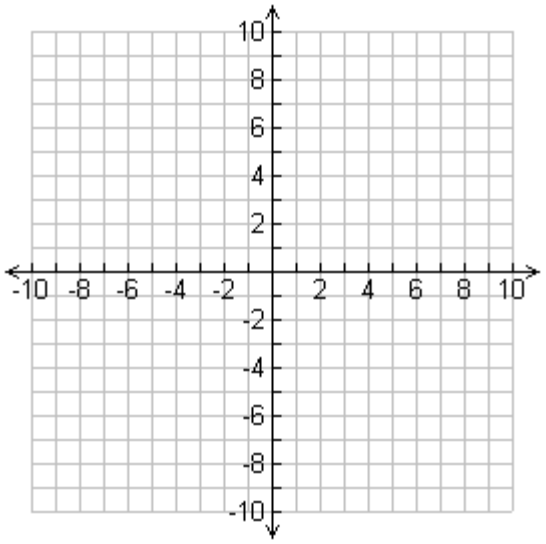
13)

x	$y = 3(x + 1)$	y	(x, y)



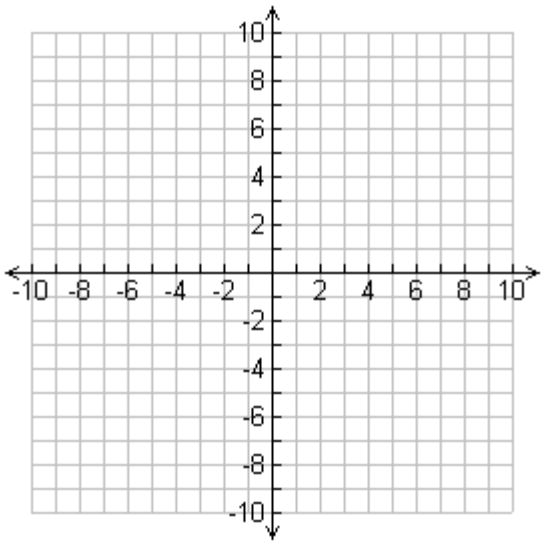
14)

x	$y = 6$	y	(x, y)



15)

x	$x = -1$	y	(x, y)



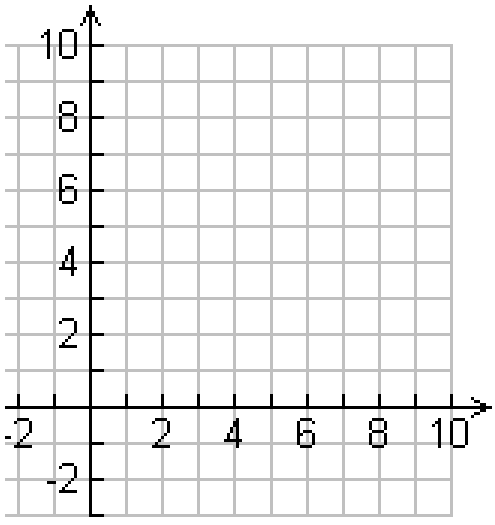
LEVEL 4

16) You earn \$15 an hour mowing lawns and \$10 an hour washing windows. You want to make \$400 in one week. An algebraic model for your earnings is $15x + 10y = 400$, where x is the number of hours you mow lawns and y is the number of hours you wash windows.

a) What are your earnings for 3 hours of mowing and 5 hours of window washing? Show your work.

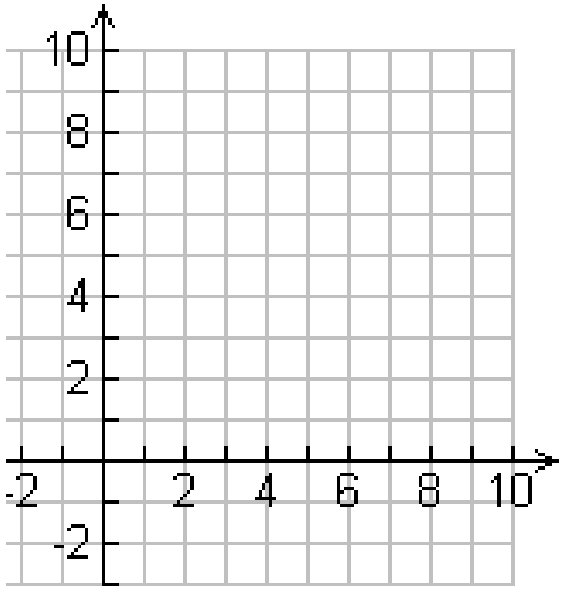
b) Solve the equation for y. Show your work.

c) Sketch a graph of the equation to the right.



17) You drive 300 miles from home. You drive towards home at a constant rate of 60 mph. The distance you are from home is $d = 300 - 60t$.

a) Sketch a graph for $t = 0$ through 4 below.



b) How long will it take you to get home?