

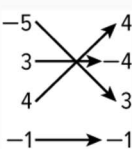
Warm Up:

State the domain and range of each relation. Then determine if each relation is a function.

1. $\{(7,2), (4,3), (3,4), (2,4)\}$

2. $\{(0.9,1.4), (1.4,0.8), (3.2,1.4)\}$

3.



4.



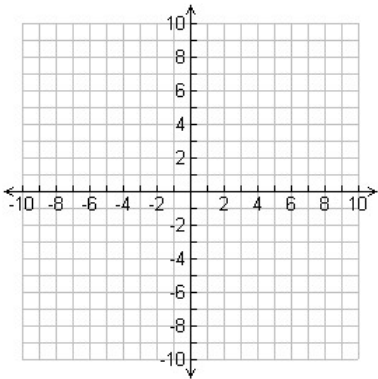
5. **PETS** According to StageofLife.com, the table illustrates the kinds of pets that high school students have owned.

Pet	Percent
dog	71
fish	60
cat	42
other	24
bird	22
rabbit	21
hamster	20
horse	6
snake	5

Example 1: Graph by Making a Table

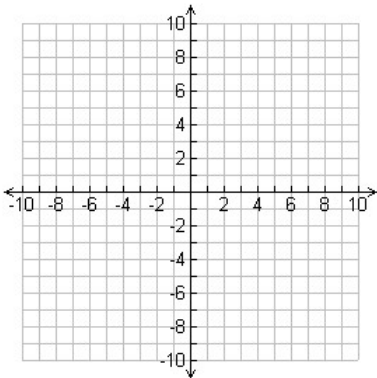
a) Graph $-2x - 3 = y$ by making a table

x	$-2x-3$	y	(x,y)



b) Graph $y = 2x + 5$ by making a table

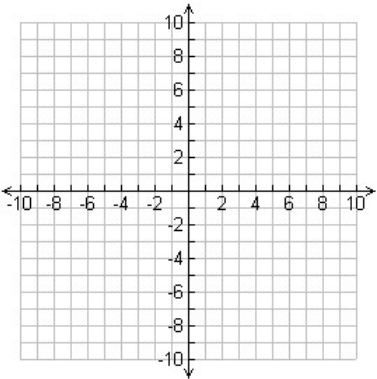
x	y



Example 2: Choose Appropriate Domain Values

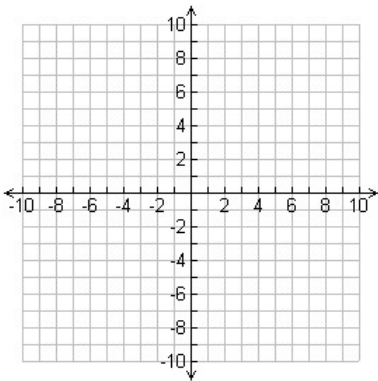
a) Graph $y = \frac{1}{4}x + 4$ by making a table

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



b) Graph $y = \frac{3}{5}x - 2$ by making a table

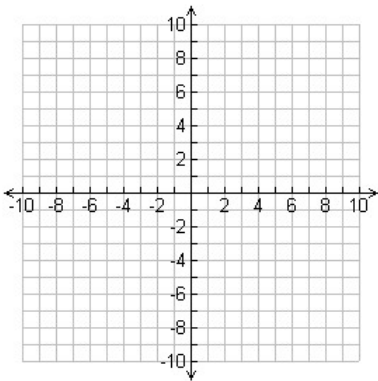
x	y



Example 3: Graph $y = a$

Graph $y = 5$ by making a table

x	y

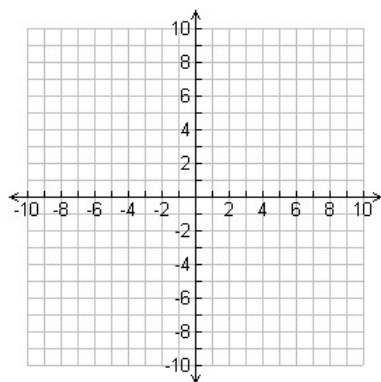


SC Algebra 1
4.1 Graphing Linear Functions

Example 4: Graph $x = a$

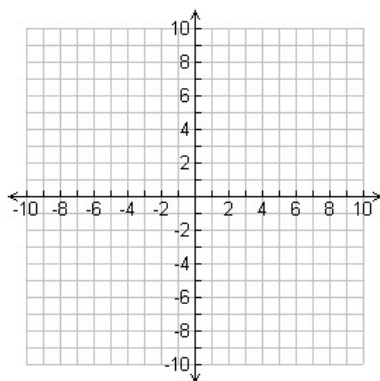
Graph $x = -2$ by making a table

x	y

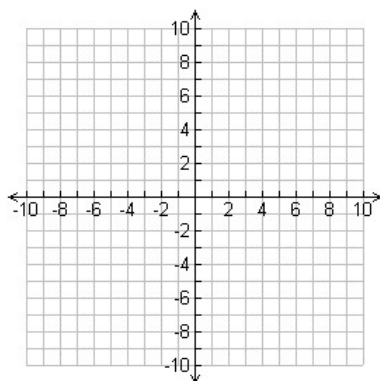


Example 5: Graph by Using Intercepts

a) Graph $-x + 2y = 8$ by finding the x- and y-intercepts.



b) Graph $4y = -12x + 36$ by finding the x- and y-intercepts.



Example 6: Using and Interpreting Intercepts

Angelina bought a 15-pound bag of dog food for her dog. The bag contains about 60 cups of food, and she feeds her dog $2\frac{1}{2}$ or $\frac{5}{2}$ cups of food per day. The function $y + \frac{5}{2}x = 60$ represents the amount of food left in the bag y after x days. Graph the amount of dog food left in the bag as a function of time.

Part A:

Find the x- and y-intercepts and interpret their meaning in the context of this situation.

Part B:

Graph the equation by using the intercepts.

