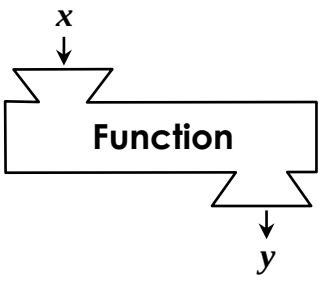
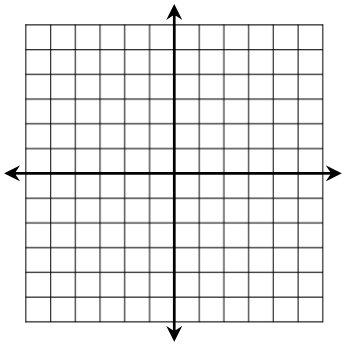
Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes/Examples
EQUATIONS as Functions	• Functions can also be represented by an _____ (or rule). • The equation will generate _____ _____ by taking an _____ that results in a certain _____. • The graph of an equation is the set of all its ordered pairs, which often forms a _____ or a _____.
	Example Functions:
	 **Think of a function like a machine that takes an x-value and produces a y-value.** • The **x-value** is called the _____ variable (because you pick it!) • The **y-value** is called the _____ variable because its value will depend on the value of x.
GRAPHING FUNCTIONS (by Table)	**Directions:** Complete each function table, then graph the function.

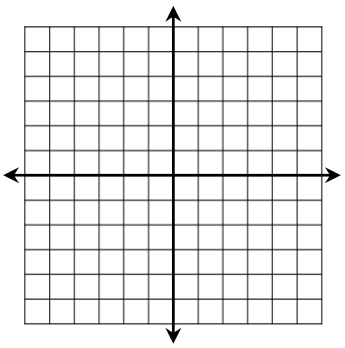
1. $y = x + 4$

x	y
-5	
-4	
-2	
0	



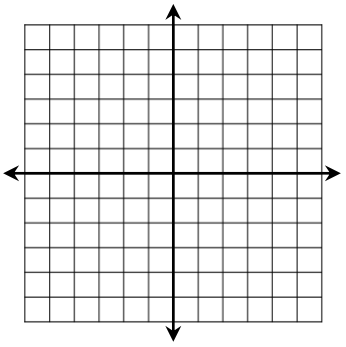
2. $y = \frac{3}{4}x - 2$

x	y
-4	
0	
4	
8	



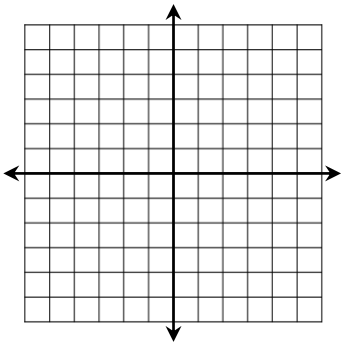
3. $y = 3x$

x	y
-2	
-1	
0	
1	



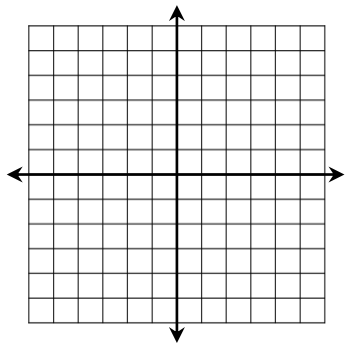
4. $y = -\frac{3}{2}x + 2$

x	y
-2	
0	
2	
4	



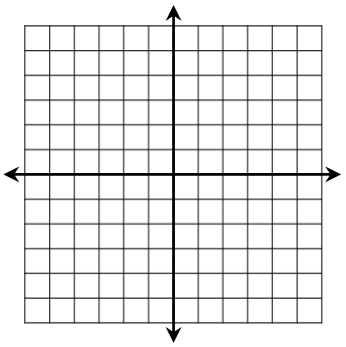
5. $y = -x + 1$

x	y
-3	
-1	
0	
4	



6. $y = 1 - \frac{1}{3}x$

x	y
-3	
0	
3	
6	



Directions: Given each function and domain, find the range values.

7. $y = x - 5$; domain = {4, 6, 8}

8. $y = 3x + 1$; domain = {-1, 0, 1, 4}

9. $y = 4 - x$; domain = {-2, 3, 5}

10. $y = \frac{3}{5}x + 2$; domain = {-10, 0, 5}

11. $y = 7 - \frac{1}{2}x$; domain = {-4, 0, 6}

12. $y = -\frac{2}{3}x + 9$; domain = {-12, -6, 3}

13. $y = 7 - 4x$; domain = {-3, -1, 5}

14. $y = \frac{1}{4}x - 5$; domain = {-8, -4, 12}

Ways to Represent RELATIONS

TABLES

x	y
3	1
-2	-4
0	2
3	6

Domain: _____

Range: _____

Function? _____

ORDERED PAIRS

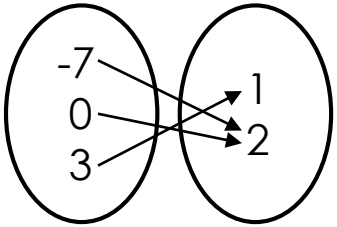
{(-1, 2), (0, 5), (2, 7)}

Domain: _____

Range: _____

Function? _____

MAPPINGS

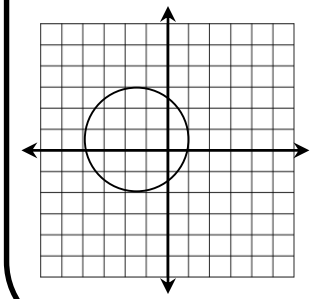


Domain: _____

Range: _____

Function? _____

GRAPHS



Domain: _____

Range: _____

Function? _____

EQUATIONS

$$y = x^2 - 1$$

Domain: _____

Range: _____

Function? _____