

Name:

Date:

Topic:

Class:

Equations as Functions

as x-values
y-values

Notes/Examples

- Functions can also be represented by an Equation (or rule).
- The equation will generate Ordered pairs (x, y) by taking an Input (x-value) that results in a certain Output (y-value).
- The x -value is always called the Independent variable.
- The y -value is always called the Dependent variable.
- The graph of an equation is the set of all its ordered pairs, which often form a Line or a curve.

Function Tables

Directions: Complete each function table.

1. $y = x + 7$

x	$y = x + 7$	y	(x, y)
-1	$y = -1 + 7 = 6$	6	(-1, 6)
0	$y = 0 + 7 = 7$	7	(0, 7)
2	$y = 2 + 7 = 9$	9	(2, 9)
4	$y = 4 + 7 = 11$	11	(4, 11)

2. $y = x - 13$

x	$y = x - 13$	y	(x, y)
3	$y = 3 - 13 = -10$	-10	(3, -10)
6	$y = 6 - 13 = -7$	-7	(6, -7)
9	$y = 9 - 13 = -4$	-4	(9, -4)
12	$y = 12 - 13 = -1$	-1	(12, -1)

3. $y = 1 - x$

x	$y = 1 - x$	y	(x, y)
-5	$y = 1 - (-5) = 6$	6	
-4			
-3			
-2			

4. $y = 2x - 7$

x	$y = 2x - 7$	y	(x, y)
0	$y = 2(0) - 7 = -7$	-7	(0, -7)
2	$y = 2(2) - 7 = -3$	-3	(2, -3)
5	$y = 2(5) - 7 = 3$	3	(5, 3)
8	$y = 2(8) - 7 = 9$	9	(8, 9)

5. $y = \frac{1}{2}x - 9$

x	$y = \frac{1}{2}x - 9$	y	(x, y)
-6	$y = (\frac{1}{2})(-6) - 9 = -12$	-12	(-6, -12)
-2	$y = (\frac{1}{2})(-2) - 9 = -10$	-10	(-2, -10)
0	$y = (\frac{1}{2})(0) - 9 = -9$	-9	(0, -9)
14	$y = (\frac{1}{2})(14) - 9 = -2$	-2	(14, -2)

6. $y = -\frac{4}{3}x + 11$

x	$y = -\frac{4}{3}x + 11$	y	(x, y)
-9	$y = (-\frac{4}{3})(-9) + 11 = 23$	23	(-9, 23)
-3	$y = (-\frac{4}{3})(-3) + 11 = 15$	15	(-3, 15)
3	$y = (-\frac{4}{3})(3) + 11 = 7$	7	(3, 7)
6	$y = (-\frac{4}{3})(6) + 11 = -3$	-3	(6, -3)