

Name _____ Date _____

In and Out Function Tables

In Algebra, the **function** of x is to produce y . That means when you know the value of x , you can **substitute** it into expressions and find the value of y . These values of x and y can be used to form **coordinate pairs** to graph.

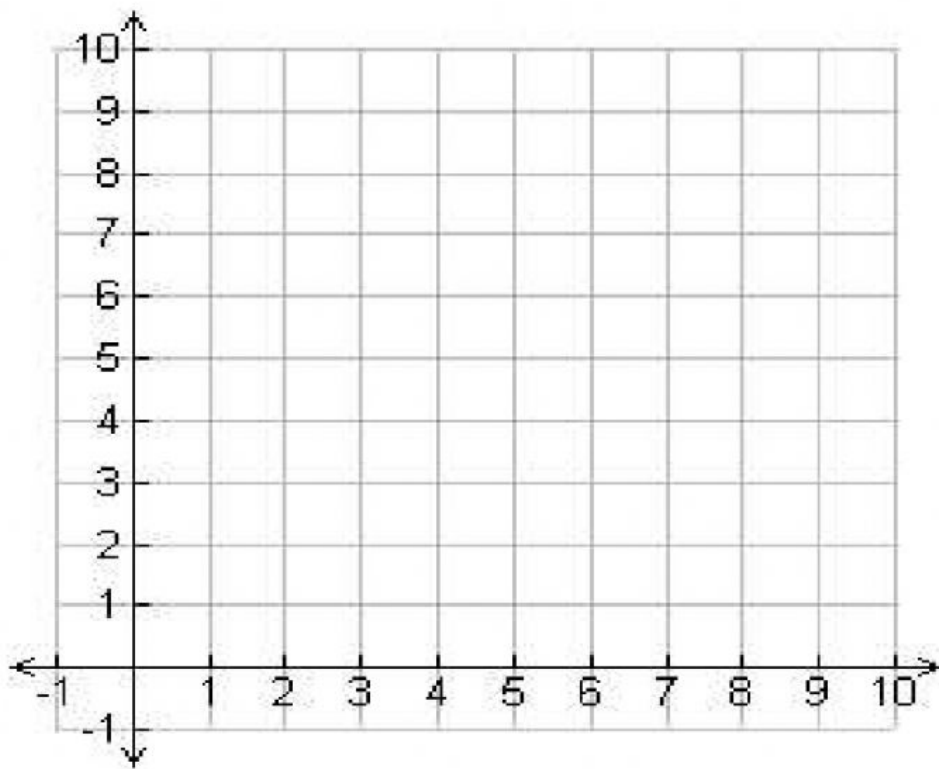
Let's look at an example. In the in and out, or function, table below, $x = 5$. As you can see, 5 is substituted for x in each equation to find y . Then the coordinate pairs are formed. You will graph the coordinate pairs in a bit.

GRAPH ONE: $x = 5$			
equation	substitution	value of y	coordinate pair
$y = x - 1$	$y = 5 - 1$	$y = 4$	(5, 4)
$y = x - 2$	$y = 5 - 2$	$y = 3$	(5, 3)
$y = x - 3$	$y = 5 - 3$	$y = 2$	(5, 2)
$y = x - 4$	$y = 5 - 4$	$y = 1$	(5, 1)
$y = x - 5$	$y = 5 - 5$	$y = 0$	(5, 0)

Now, complete the in and out function table below and graph the results.

GRAPH TWO: $x = 3$			
equation	substitution	value of y	coordinate pair
$y = x + 7$		$y =$	(,)
$y = x + 6$		$y =$	(,)
$y = x + 5$		$y =$	(,)
$y = x + 4$		$y =$	(,)
$y = x + 3$		$y =$	(,)

GRAPH ONE: $x = 5$



GRAPH TWO: $x = 3$

