



### Lesson Objectives

Represent functions with tables, graphs, or equations

### Vocabulary

function (p. 134) \_\_\_\_\_

\_\_\_\_\_

input (p. 134) \_\_\_\_\_

\_\_\_\_\_

output (p. 134) \_\_\_\_\_

\_\_\_\_\_

domain (p. 134) \_\_\_\_\_

range (p. 134) \_\_\_\_\_

vertical line test (p. 135) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

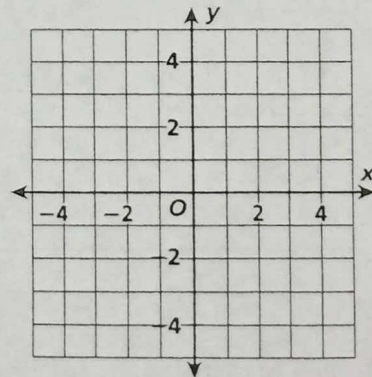
### Additional Examples

#### Example 1

Make a table and a graph of  $y = 3 - x^2$ .

Make a table of inputs and outputs. Use the table to make a graph.

$x$	$3 - x^2$	$y$
-2	<input type="text"/>	<input type="text"/>
-1	<input type="text"/>	<input type="text"/>
0	<input type="text"/>	<input type="text"/>
1	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>



**Example 2**

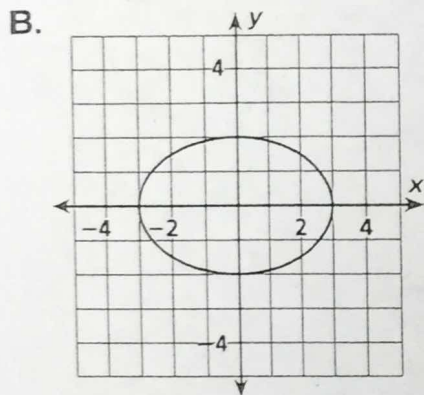
Determine if each relationship represents a function.

A.

x	2	3	3	2
y	3	4	5	6

The input  $x = 2$  has  outputs,  $y =$   and  $y =$  .

The input  $x = 3$  also has more than one output. The relationship is



The input  $x = 0$  has  outputs,  
 $y =$   and  $y =$  . Other  $x$ -values also  
 have more than one  $y$ -value. The relationship  
 is .

**Try This**

1. Make a table and a graph of  $y = x + 1$ .

x	$x + 1$	y
-1	<input type="text"/>	<input type="text"/>
0	<input type="text"/>	<input type="text"/>
1	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>

