

## What Are Functions?

**1** Fill in the blank.

The input set of a function is called the \_\_\_\_\_ and the output set is called the \_\_\_\_\_

**2** True or False?

Functions aren't allowed to have "one-to-many" relations.

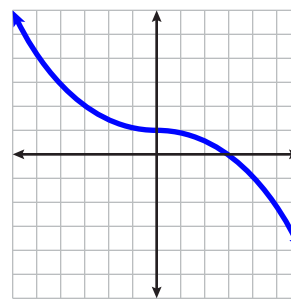
True       False

**3** Complete this function table.

$$y = 2x - 1$$

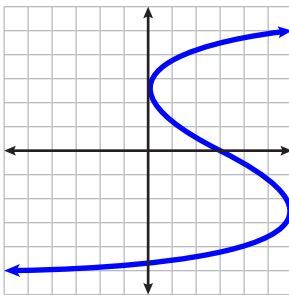
Input x	Output y
3	5
2	
1	
0	
-1	

**4** Is this a function?  
(Hint: Use the vertical line test.)



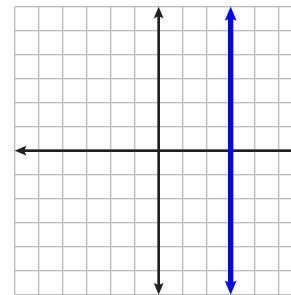
Yes  
 No

**5** Is this a function?  
(Hint: Use the vertical line test.)



Yes  
 No

**6** Is this a function?  
(Hint: Use the vertical line test.)



Yes  
 No

**7** Evaluate.

Let  $f(x) = x^2 + 1$   
What is  $f(3)$  ?

**8** Evaluate.

Let  $f(x) = x^2 + 3x$   
What is  $f(-1)$  ?