

Exploring Relations & Functions (part 1)

Definition: A function is a relation that pairs each input value with exactly one output value.

Let $f(x) = 2x+1$, $g(x) = \frac{1}{2}(x-1)$, and $h(x) = x$.

1. Describe the relationship between the graphs of $f(x)$ and $g(x)$ in relation to the graph of $h(x)$.
-

2. Complete the following tables.

x	f(x)
-1	
-1/2	
0	
1/2	
1	

x	g(x)
-1	
0	
1	
2	
3	

3. Compare the values in the tables.
-

4. Using the definition of a function (above), is $f(x)$ a function? Is $g(x)$ a function? Why or why not?

5. Name the "x" column in each table "domain" and the other column in each table "range." Compare the tables in terms of "domain" and "range."
-

6. Two functions with this relationship are called "inverse" functions. Write a definition for inverse functions.

Go to next page...