

Quiz 12

Name \_\_\_\_\_

1. Which of the following tables describes a function?

input	output
-1	20
-2	25
0	30
2	35
2	40
3	45
4	50

input	output
0	0
2	0
4	0
6	1
8	1
10	1
12	1

input	output
0	0
0	2
0	4
2	6
2	8
3	10
4	12

input	output
-3	.125
-2	.25
-1	.5
0	1
1	2
2	4
3	8

Let the function  $F$  be given by the following ordered pairs:

$$F := \{(.001, -3), (.01, -2), (.1, -1), (0,1), (1,10), (2,100), (3,1000)\}$$

2. Explain in clear English why  $F$  is a function.

3. Write the domain of  $F$  as a set.

4. Write the range of  $F$  as a set.

5.  $F(.001) = \underline{\hspace{1cm}}$ ,  $F(.01) = \underline{\hspace{1cm}}$ ,  $F(.1) = \underline{\hspace{1cm}}$ ,  $F(1) = \underline{\hspace{1cm}}$ ,  $F(1) = \underline{\hspace{1cm}}$ ,  $F(2) = \underline{\hspace{1cm}}$ ,  $F(3) = \underline{\hspace{1cm}}$

6. Let  $g(x) = \begin{cases} -x + 1, & x < 1 \\ x^2 + 1, & x \geq 1 \end{cases}$

$$g(-1) = \underline{\hspace{1cm}}, g(0) = \underline{\hspace{1cm}}, g(1) = \underline{\hspace{1cm}}, g(2) = \underline{\hspace{1cm}}$$