Unit 1: Functions - Quiz 2

Name Exemplar **PER** _____ **DATE** _____

FIFA1	FIFA2	AREID10

Computation

4	3	2	1
Response has no recall errors, *minimal* procedural errors* and no conceptual errors**	**Response has no recall errors, minimal procedural errors and *minimal* conceptual errors**	**Response has no recall errors, but has several procedural errors OR several conceptual errors**	**Recall errors exist OR Steps taken are not related to problem OR Response left blank**

Written Responses

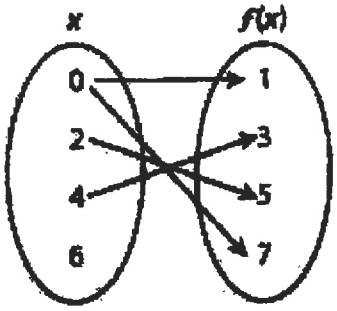
4	3	2	1
Response is written in a complete sentence and uses appropriate academic vocab	**Response is written in a complete sentence, and minimal errors exist in use of academic vocab**	**Response is not written in a complete sentence OR no academic vocab**	**Concept of response is not related to problem OR Response is left blank**

***Procedural errors** are mistakes made in the math
****Conceptual errors** are mistakes made in the steps one take

BOX YOUR ANSWERS!!!

1. **(FIFA1)** Three relations are shown below. Determine which of these relations are functions. Justify why it is a function and why it is not a function in the space provide.

Relation 1



This is not a function since the input 0 has two output values 1 and 7.

Relation 2

x	y
-2	5
-1	2
0	1
1	2
2	5

This is a function since every input has its own unique output.

Relation 3

{(-2, 1), (1, -2), (0, 2), (1, 1), (2, -1)}

This is not a function since the input 1 has two output values of -2 and 1.

2. **(FIFA2)** Rita wrote the function below, which represents the number of minutes of exercise for each hour of sleep (x).

$f(x) = 5x - 10$

inputs

Complete the following table. For each missing value, so the work that led to the new value.

outputs

Hours of Sleep (x)	*Minutes of Exercise f(x)*
2	0
5	15
8	30
8	30

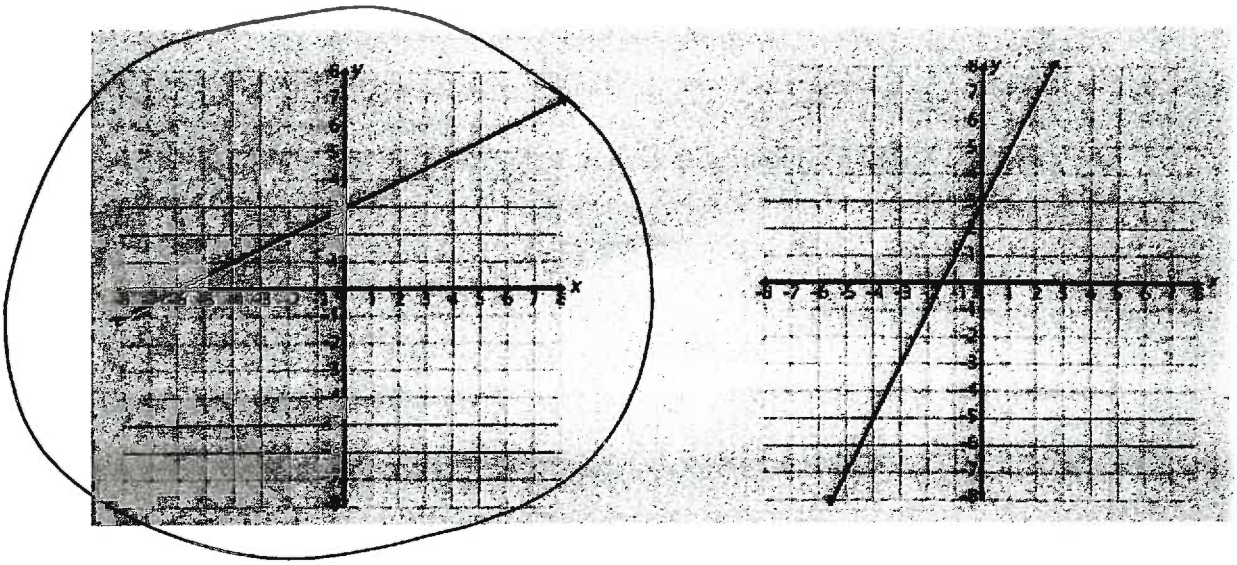
① $5x - 10 = 0$
$+10 \quad +10$
$\frac{5x}{5} = \frac{10}{5}$
$x = 2$

② $5(5) - 10 =$
$25 - 10 =$
$15 =$

③ $5(8) - 10 =$
$40 - 10 =$
$30 =$

④ $5x - 10 = 30$
$+10 \quad +10$
$\frac{5x}{5} = \frac{40}{5}$
$x = 8$

3. **(AREID10) Which of the following functions shows the graph of y = 1/2x+3? Justify why you chose the graph in the space below.**



The first graph matches the function since when I evaluate the function @ x = 2, y = 4. The first graph is the only one ~~[illegible]~~ that includes the coordinate (2,4).

$y = \frac{1}{2}x + 3$

$y = \frac{1}{2}(2) + 3$

$y = \frac{2}{2} + 3$

$y = 1 + 3$

$y = 4$