BECA / Huson / 11.1 IB Math SL Name:

29 September 2017

Review: Functions from the Algebra II Regents point of view

Do the following relations represent functions? Circle yes or no and explain how you know. **If the relation is not a function, be specific about what value violates the definition of a function.*

Circle Explanation:

1. (1, -2), (-2,1), (3,6), (-2,-1), (5,2) YES NO _____

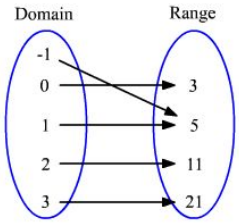
_____

2.

x	y
-1	3
1	4
4	-2
2	4
3	2
-4	-3

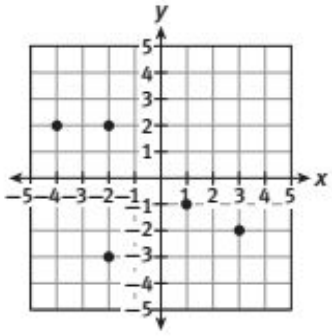
YES NO _____

_____

3. 

YES NO _____

_____

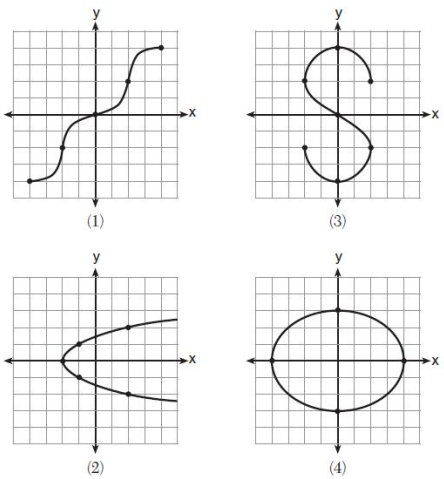
4. 

YES NO _____

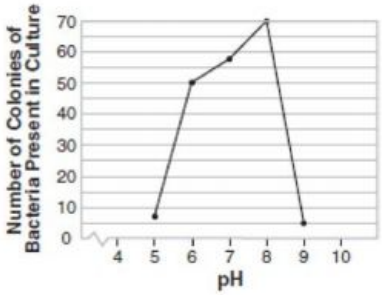
_____

For #5-6, circle the best answer:

5. 9 Which graph represents a function?



6. The accompanying graph illustrates the presence of a certain strain of bacteria at various pH levels.



What is the range of this set of data?

1) $5 \le x \le 9$
2) $5 \le x \le 70$
3) $0 \le y \le 70$
4) $5 \le y \le 70$

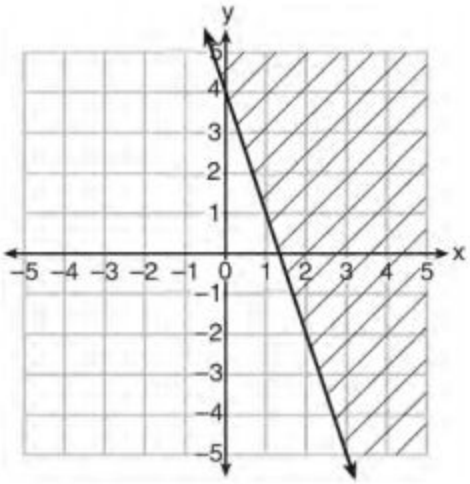
7. Answer the following questions using the function $h(x) = x^2 - 3$, and express your answers in function notation.

a. Find h(4)

b. Find h(-1)

c. Find x when h(x)=6

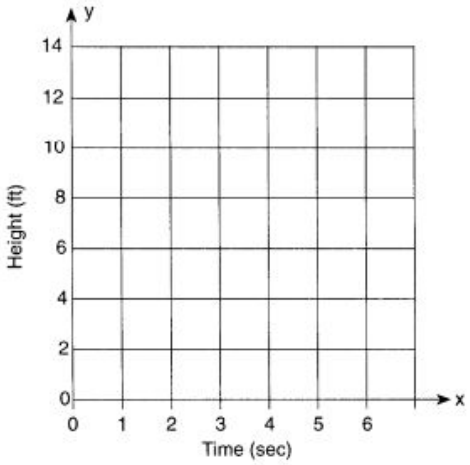
8. Which inequality is represented in the graph below?



1 $y \geq -3x + 4$
2 $y \leq -3x + 4$
3 $y \geq -4x - 3$
4 $y \leq -4x - 3$

9. Amy tossed a ball in the air in such a way that the path of the ball was modeled by the equation $y = -x^2 + 6x$. In the equation, y represents the height of the ball in feet and x is the time in seconds.

a Graph $y = -x^2 + 6x$ for $0 \leq x \leq 6$ on the grid provided below.



b At what time, x, is the ball at its highest point?

Reflection: Based on your attempt at this pre-test...

+ What specifically about Functions do you feel confident on from your previous math experiences?

- What specifically about Functions do you feel you could use *more practice*, or one-on-one help with?