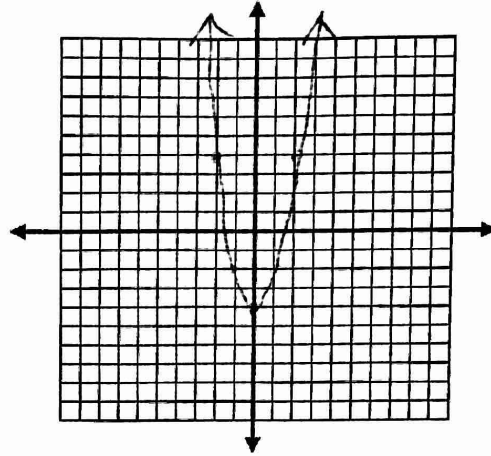


Bellwork

Name _____

A. Make a table and graph the following equation: $y = 2x^2 - 4$

x	y
-2	4
-1	-2
0	-4
1	-2
2	4
3	14

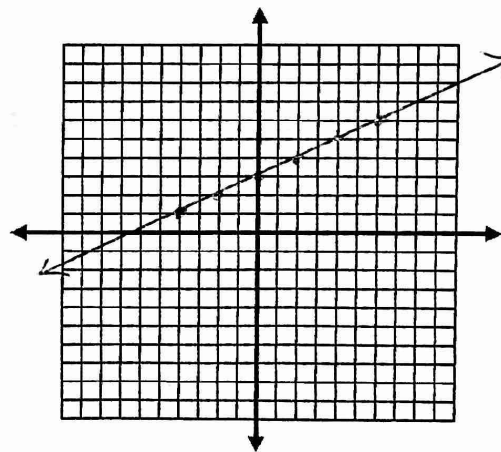


Questions:

1. Is it linear? Y or N
2. Is it a function? Y or N
3. List 3 more solutions to the equation that are not listed in your data table: $(-3, 14)$ $(4, 28)$ $(-4, 28)$

B. Make a table and graph the following equation: $y = \frac{1}{2}x + 3$

x	y
-4	1
-2	2
0	3
2	4
4	5
6	6



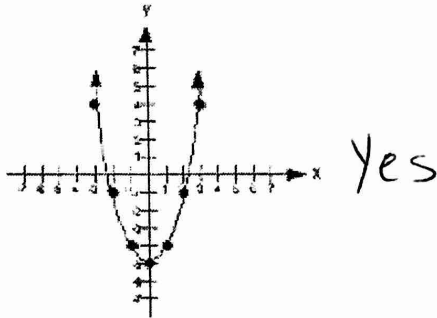
Questions:

4. Is it linear? Y or N
5. Is it a function? Y or N
6. List 3 more solutions to the equation that are not listed in your data table: $(-6, 0)$ $(-8, -1)$ $(8, 7)$

What is the rule for determining if a relation is a function? *It is a function if each input has only one output.*

Function or not? Explain your reasoning.

1. $\{(2, 3) (-2, -4) (5, -4) (6, 3)\}$ Yes
 2.



- 3.
-
- No, zero repeats

4. $\{(2, 3) (2, -4) (5, 4) (6, 3)\}$ No, 2 repeats

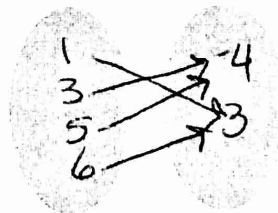
What are the rules for listing the domain and range? *Use brackets, list each number only once, list numbers numerically- least to greatest*

List the domain and range for each relation. Next do a mapping of each relation. (least to greatest, use arrows)

1. $\{(1, 3) (3, -4) (5, -4) (6, 3)\}$

Domain: $\{1, 3, 5, 6\}$

Range: $\{-4, 3\}$



2. $\{(2, 3) (-2, -4) (5, -4) (5, 8)\}$

Domain: $\{-2, 2, 5\}$

Range: $\{-4, 3, 8\}$

