Warmup 9/$\left(\sqrt[3]{8}\right)^2$ Created by Ms. Niemiec

Complete "Whoops Wednesday!!!"

Early finishers: Try to prove why Ms. Niemiec's problem above works for today.

****If you have any last-minute questions about the homework, ask them now!!!***

Early Finishers on Quiz:

You may take a puzzle from the cabinet, but they will go away once we start our Functions Lesson

List of names…

This list of names is for the graduation ceremony at the end of the year.

When the list comes around, find your name and check it off if it is correct. If you have a change (i.e. needs an accent mark, you want your full name instead of your nickname, etc.) write the changes in the box.

Add to your table of contents...

Table of Contents

What is a Function?

<u>**Objective:**</u>

-Be able to tell if something is a function or not
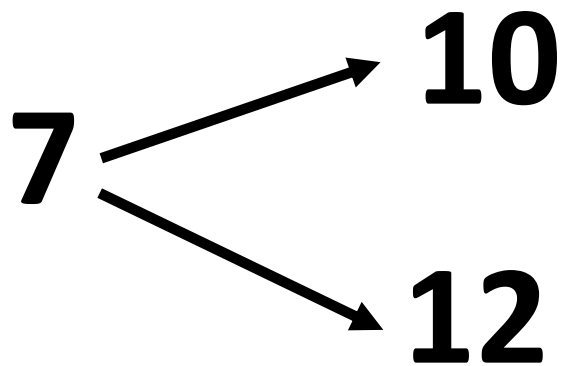
-From a table or from a graph

Guess My Rule!

- **I am thinking of a mathematical rule.**

- **It could be one-step, two-steps, or more.**

- **I will call on random people to give me an input.**

- **Using my rule, I will calculate the output, then tell you.**

- **A volunteer will record the inputs and outputs.**

- **Raise your hand when you think you know the rule!**

5 → 25
-5 → 25

FAIR!!!

7 → 10
7 → 12
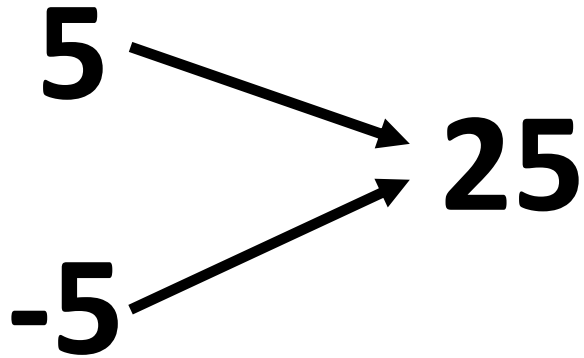
NOT FAIR!!!

Vocab- write this in your binder

- **A <u>function</u> is a rule.** **Each <u>input</u> must only have one <u>output</u>.**
  - **(Each x value can only be paired with one y value)**

Function?

x	y
3	6
5	10
5	12
8	14
12	18

No; the input "5" has more than one output.

Function?

x	y
-8	16
10	-20
1	-2
4	-8
1	-2

Yes; there is a repeated input, but the output is the same.

Function?

x	y
1	5
1	6
2	7
2	8
3	9

No; the inputs "1" and "2" have more than one output.

Function?

x	y
1	24
2	9
3	-6
4	-21
5	-36

Yes; each input has only one output.

Function?

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

Yes; each input has only one output. (You can have the same output for multiple inputs!)

Function?

(2, 8); (-5, 9); (7, 9); (2, -4), (7, 4)
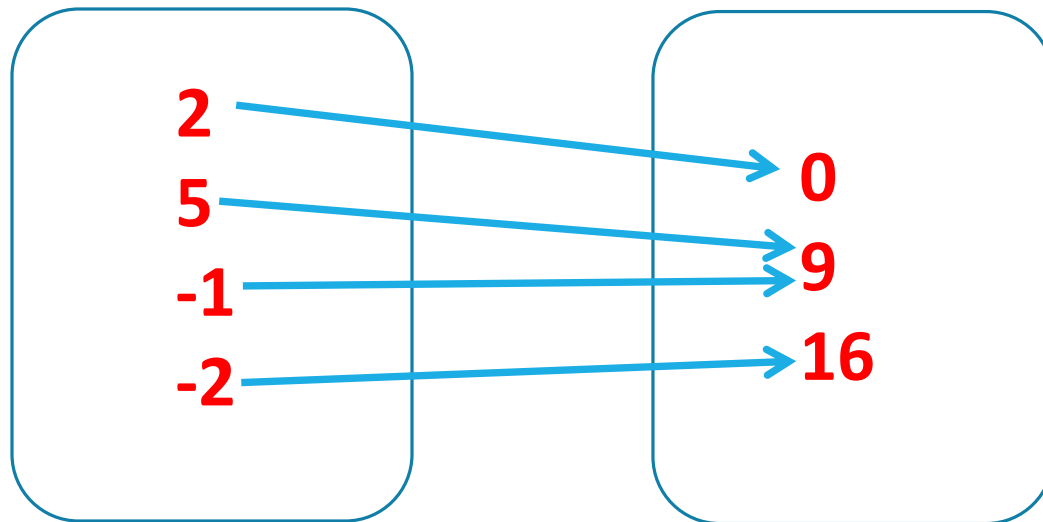
No; the input "2" has more than one output.

Function?

(1, 5); (8, 19); (4, 11); (-8, -13), (1, 5)
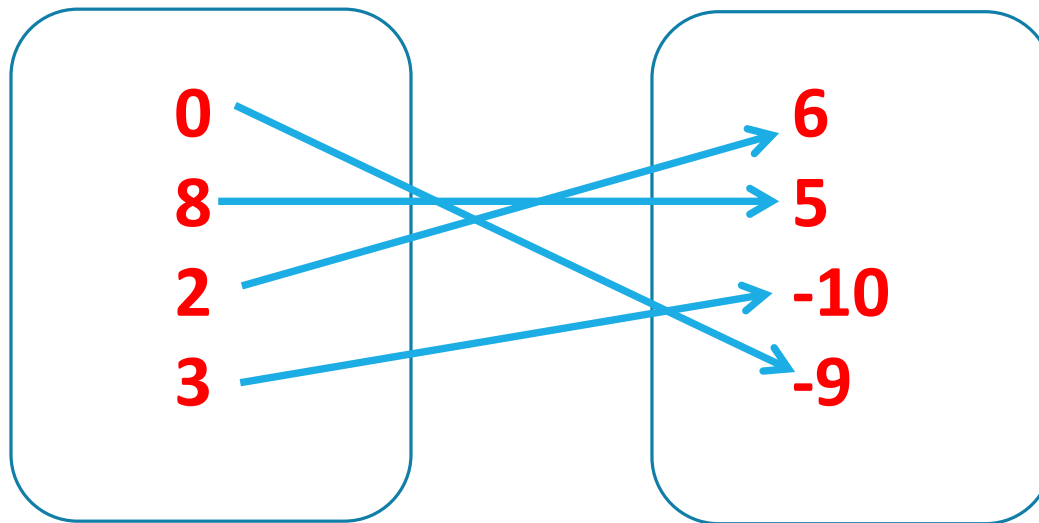
Yes, each input has only 1 output.

Mapping Diagram:

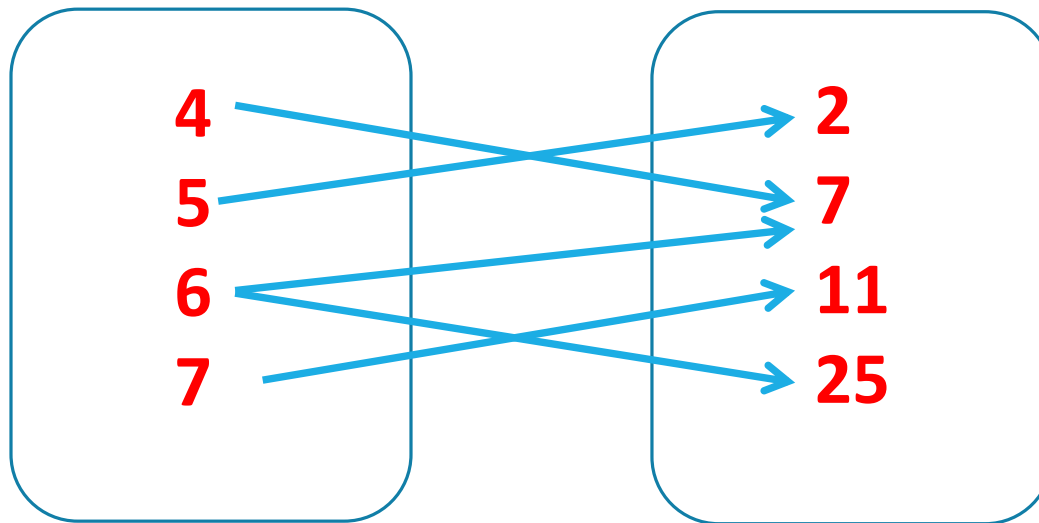Express the relation **(2,0), (5, 9), (-1, 9), (-2, 16)** as a mapping diagram.

Function?
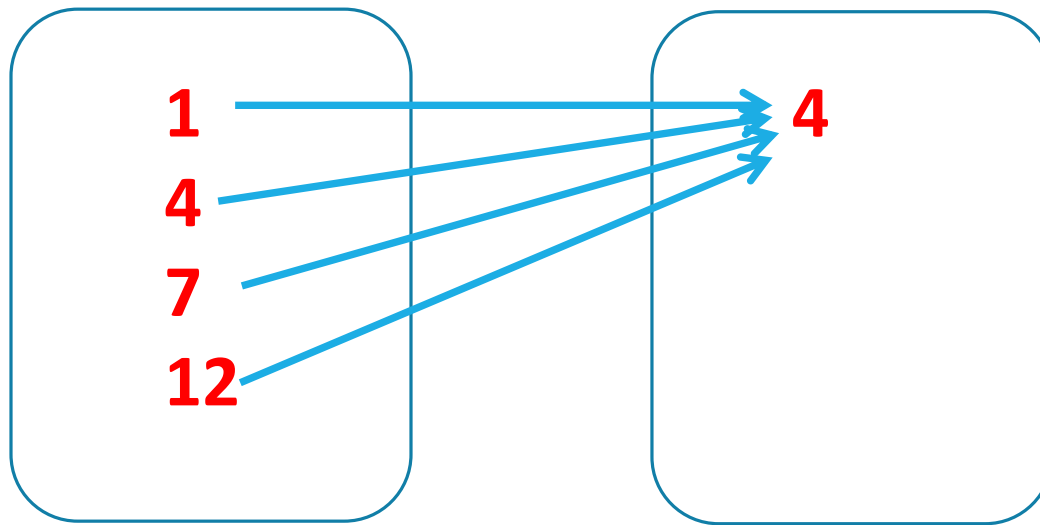

Yes, each input has only 1 output.

Function?

No; the input "6" has more than one output.

Function?

1

4

7

12

4

Yes, each input has only 1 output.