

# Non-Linear Functions

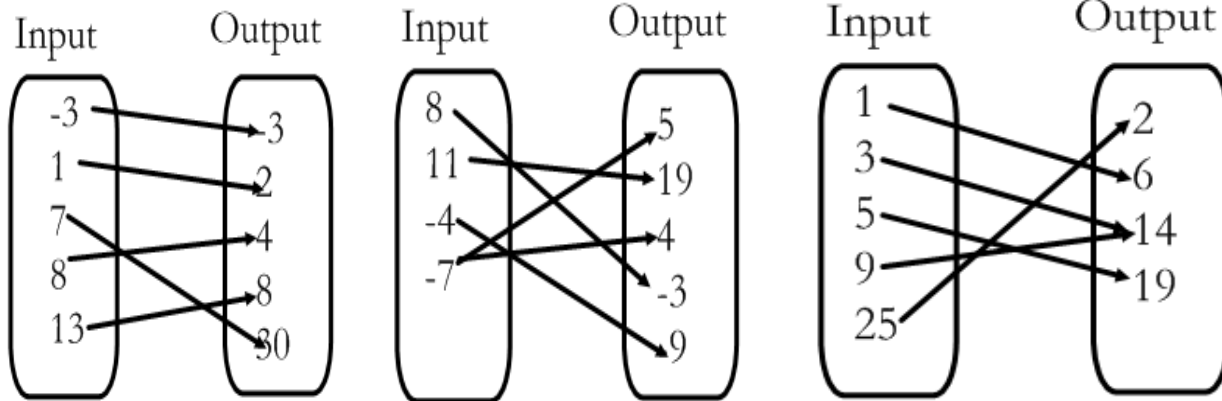
## Extra Practice (C)

Name: \_\_\_\_\_

### Part A: Determining Function with Tables and Mappings

Determine if each relation below is a function and explain why or why not.

1. 2. 3.



4. 5. 6.

x	y
-7	9
-3	11
-1	-8
6	8
-3	19
-9	-10

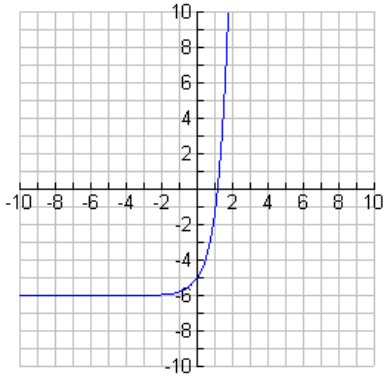
x	y
-6	13
-4	18
-2	25
0	34
2	45
4	58

x	y
3	18
8	11
11	4
7	-6
2	18
-1	21

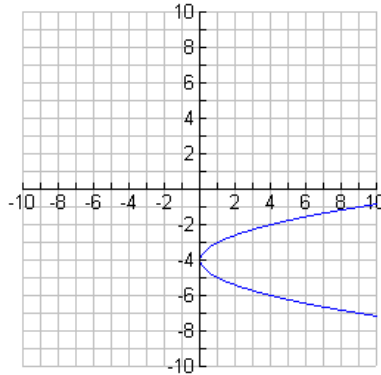
## Part B: Determining Functions with Graphs

Determine if each graph is a function.

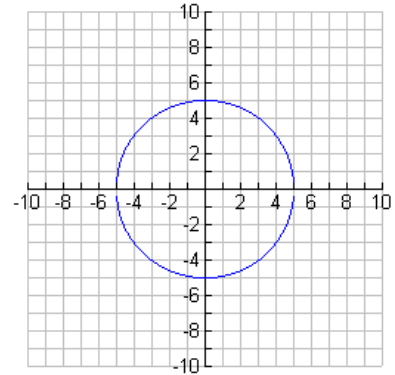
1.  
Function: Y N



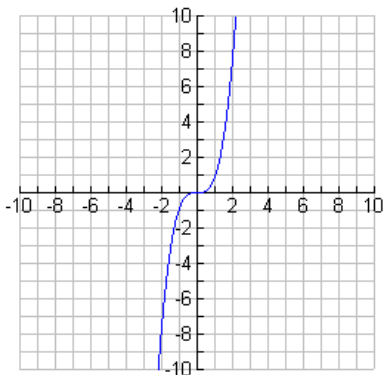
2.  
Function: Y N



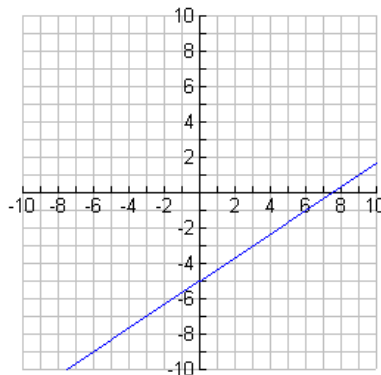
3.  
Function: Y N



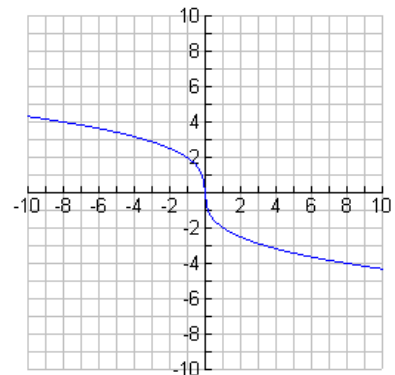
4.  
Function: Y N



5.  
Function: Y N



6.  
Function: Y N



7.  
Function: Y N

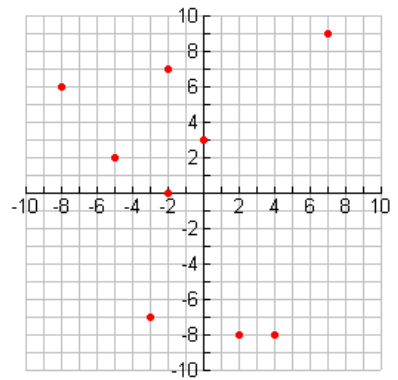
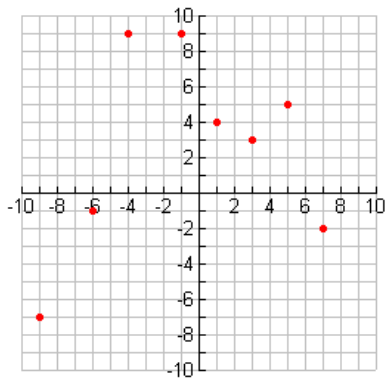
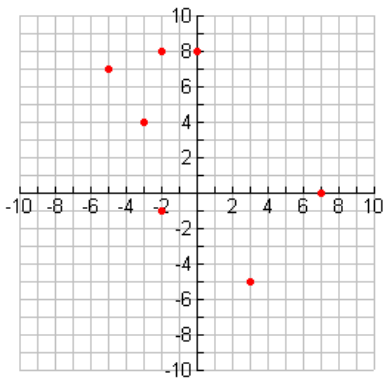


8.  
Function: Y N



9.  
Function: Y N

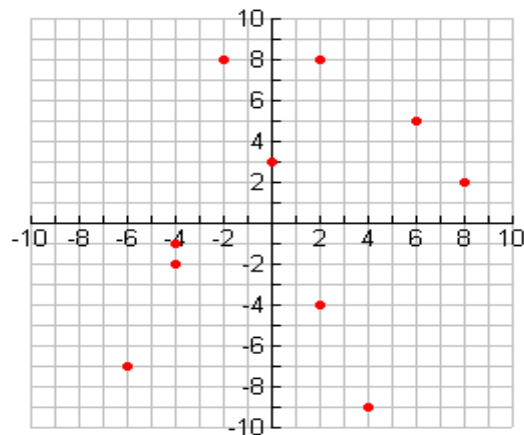
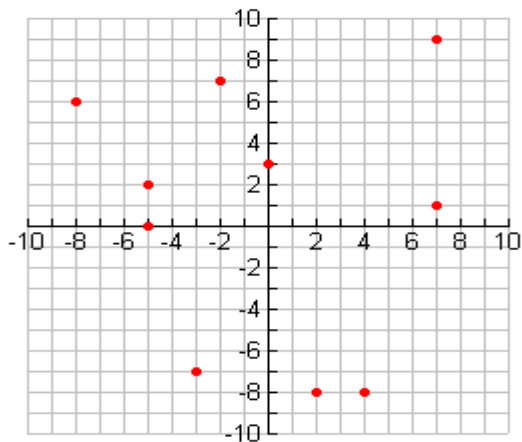




The following are not functions. State the changes you would make in order to make it a function.

10.

11.



### Part C: Determining Functions from Tables

Determine if the relation below is a linear, quadratic, exponential, absolute value or other function.

1.

2.

3.

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

x	y
0	-4
1	-2
2	4
3	22

4.

x	y
-4	10
-3	5
0	-10
2	-20

x	y
-3	-8
-2	-1
0	-8
3	-1
-1	-1
0	0
1	1

5.

**Part D: Identify**

**Analytically**

**Functions Graphically and**

- A. Linear Function    B. Quadratic Function    C. Exponential    D. Absolute Value    E. Other

Match the correct function to the equation or graph below.

\_\_\_1.  $y = 7(x - 2)^2 + 4$

\_\_\_2.  $f(x) = -2|x + 3| - 5$

\_\_\_3.  $h(x) = 6x^3 + 5$

\_\_\_4.  $g(x) = 7^x - 4$

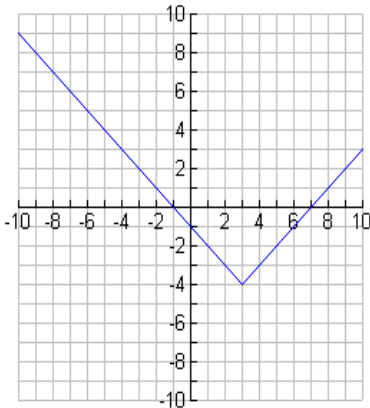
\_\_\_5.  $y = 7(x + 3) - 9$

\_\_\_6.  $f(x) = -9x^2 - 11x + 4$

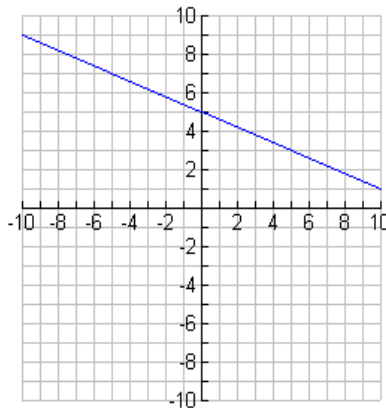
\_\_\_7.

\_\_\_8.

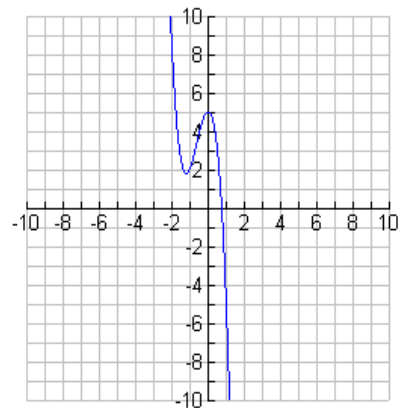
\_\_\_9.



\_\_\_10.



\_\_\_11.



\_\_\_12.

