

Homework: Week Eight

Monday	Tuesday	Wednesday	Thursday	Friday
Input/Output †	Review/Quiz	Testing for Functions	Unit 4 Review	Unit 4 Test

Objectives:

F-BF.1 Write a function that describes a relationship between two quantities.

a. Determine an explicit expression, a recursive process, or steps for calculation from a context.

Homework Check:

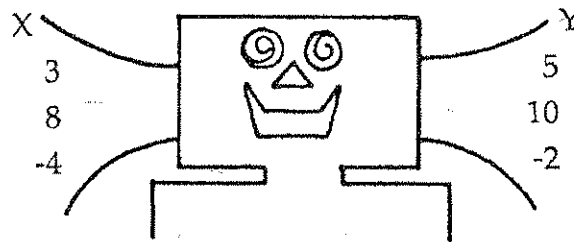
Problem: Question:	Problem: Question:	Problem: Question:	Problem: Question:
Answer:	Answer:	Answer:	Answer:
____/2	____/2	____/2	____/2

Homework Grade: ____/8 pts

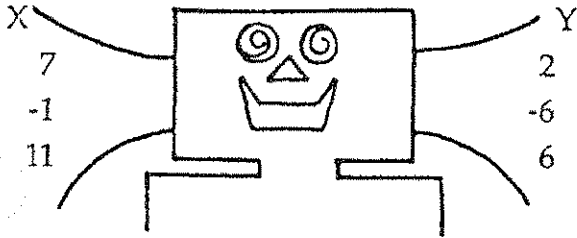
Input-Output Machine

Our input-output machine takes a number $[x]$, operates on the number, and changes it to a new number $[y]$. Below are some input-output machines, the input $[x]$, and the output $[y]$. Can you figure out the rule for what the machine did to the input?

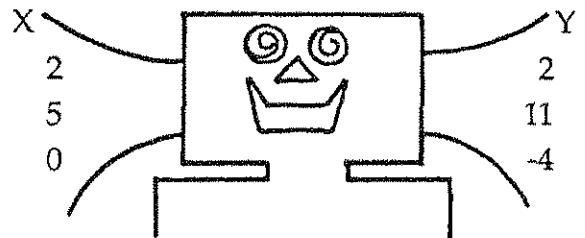
Example:



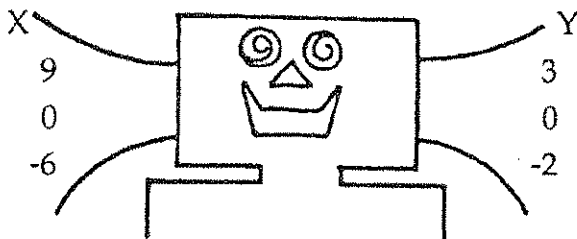
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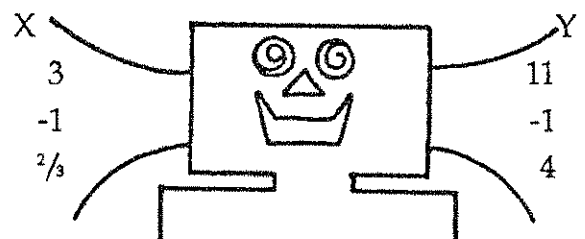
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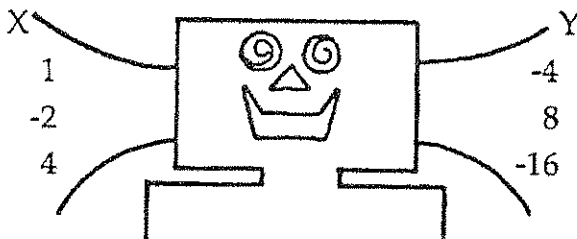
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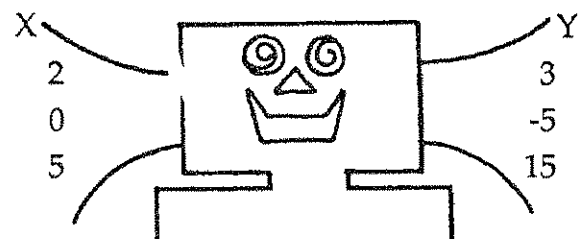
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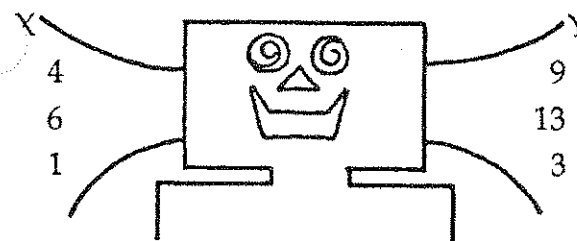
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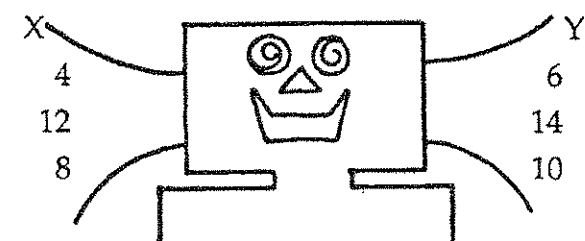
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4.



8.



Function Tables

Name: _____ Date: _____

Complete the function table for each equation.

(1) $y = x + 3$

x	y
-1	2
0	3
2	5
5	8

(2) $y = 2x$

x	y
-9	
$-1\frac{1}{2}$	
-1	
0	

(3) $y = 3x + 1$

x	y
-8	
-5	
4	
9	

(4) $y = -2x$

x	y
-8	
-5	
-4	
6	

(5) $y = 3x$

x	y
-6	
3	
6	
8	

(6) $y = -x + 5$

x	y
-9	
-5	
-3	
1	

(7) $y = x + 5$

x	y
-6	
-4	
1	
6	

(8) $y = x + 4$

x	y
-9	
-3	
1	
6	

(9) $y = x - 4$

x	y
-3	
-1	
5	
6	

(10) $y = -3x$

x	y
-3	
-2	
1	
5	

(11) $y = x + 6$

x	y
-8	
-5	
-3	
5	

(12) $y = 2x - 2$

x	y
-6	
-3	
$-2\frac{1}{2}$	
$\frac{1}{2}$	

Day 5 Homework

Name _____ Period _____ Date _____

1. Use the given equations to find the missing output values.

a. $y = 3 - x$

Input x	Output y
-4	
-3	
-2	
-1	
0	
1	
2	

b. $y = -1.5 + 3x$

Input x	Output y
-2	
-1.5	
-1	
-0.5	
0	
0.5	
1	

c. $y = 6.8 + 0.5x$

Input x	Output y
-6	
-2.4	
1	
2.8	
-14	
3.1	
-17.5	

2. Use the given equations to find the missing domain and range values.

a. $y = -3x + 5$

Domain x	Range y
-4	
-2	
	5
3	
	-7

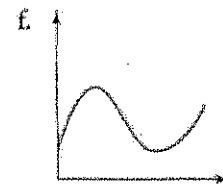
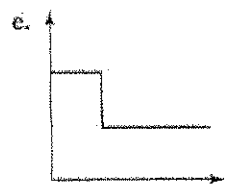
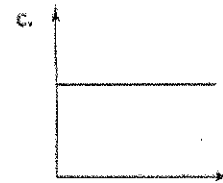
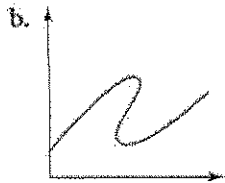
b. $2x - 3y = 6$

Domain x	Range y
	0
0	
	2
-6	
	5

c. $x^2 - 2y = 11$

Domain x	Range y
-3	
0	
	7
1	
4	

3. Find whether each graph represents a function.



Determine the next term in each sequence and then write the NOW – NEXT, equation for each.

1. 1, 4, 12, 36,

2. 1, 5, 17, 36, ...

3. 64, 16, 4, 1, ...

Fill in the table below for the given INPUT – OUTPUT Rule.

4.

INPUT	OUTPUT
-1	
0	
2	
3	
5	

$$\text{OUTPUT} = -3 * \text{INPUT} + 2$$

5.

INPUT	OUTPUT
-3	
5	
7	
12	
-10	

$$\text{OUTPUT} = -4 * \text{INPUT}$$

Write the INPUT – OUTPUT rule and fill in the empty boxes.

6.

In	0	2	5	6
Out	5		15	

7.

In	-1	1	3	-3
Out	4			3

8.

In	-2	1	0	7
Out		-1		17

For each of the following, write as a relation, list the domain, list the range, and indicate if it is a function.

9.

x	y
0	1
1	-1
2	-3
3	-5
4	-7

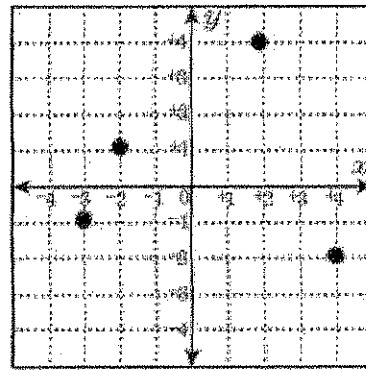
Relation

Domain

Range

Function ?

10.



Relation

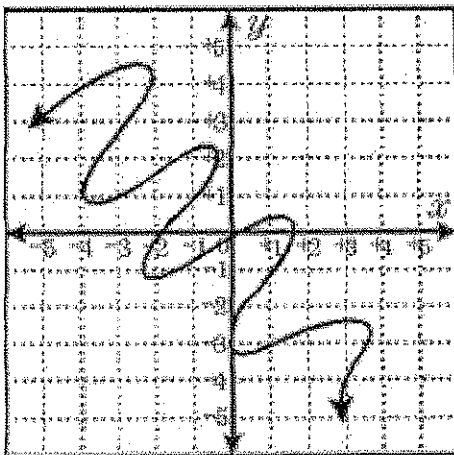
Domain

Range

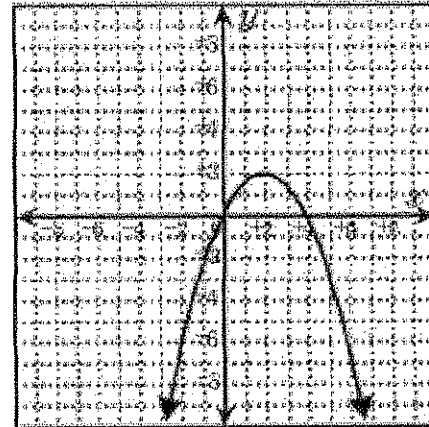
Function?

Determine if the following are functions. Explain why or why not?

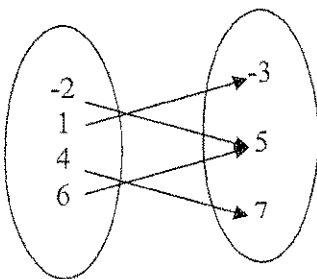
11.



12.



13.



14.

Input	Output
x	y
2	8
3	11
5	12
7	3
9	5
8	7
4	11