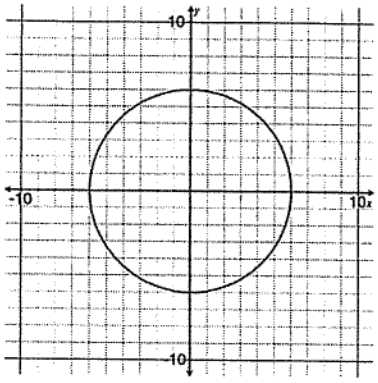
Extended Algebra 1

Name:_____

Functions Worksheet 1

For exercises 1-6. decide whether each graph is the graph of a function. Then determine domain and range.

1.

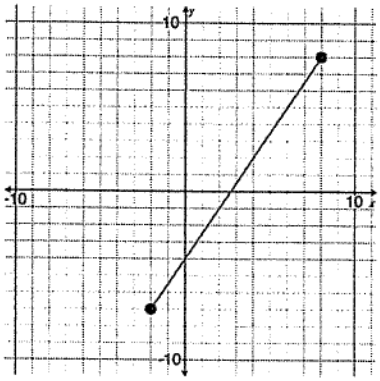


(a) Is it a function?

(b) Domain:

(c) Range:

2.

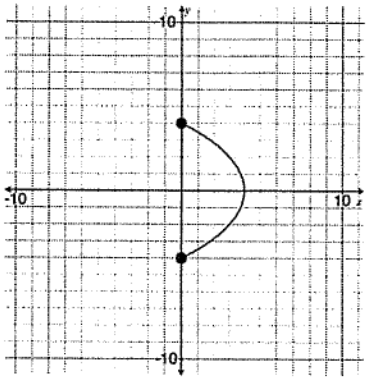


(a) Is it a function?

(b) Domain:

(c) Range:

3.

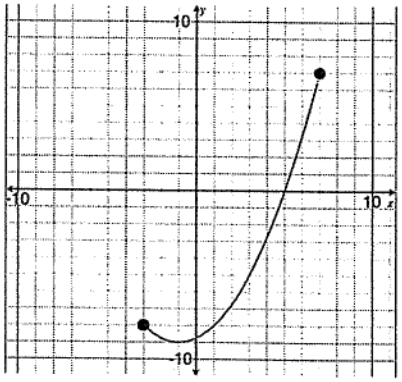


(a) Is it a function?

(b) Domain:

(c) Range:

4.

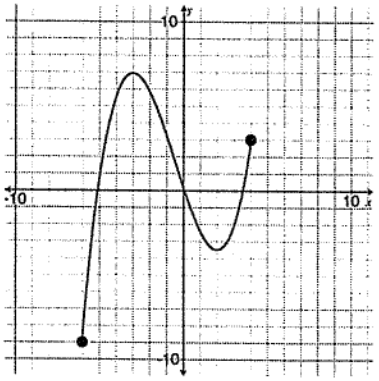


(a) Is it a function?

(b) Domain:

(c) Range:

5.

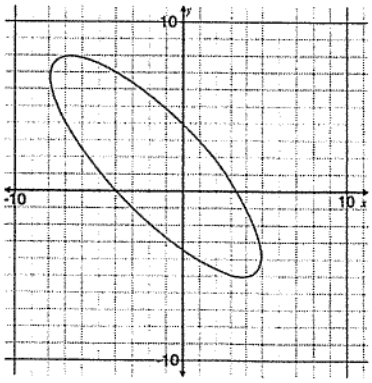


(a) Is it a function?

(b) Domain:

(c) Range:

6.



(a) Is it a function?

(b) Domain:

(c) Range:

For exercises 7-12, use each table to determine whether the relation is a function. Then determine the domain and range.

7.

x	2	4	6	8	10
y	1	3	5	7	9

(a) Is it a function?

(b) Domain:

(c) Range:

8.

x	2	2	4	4	6
y	-5	0	5	10	15

(a) Is it a function?

(b) Domain:

(c) Range:

9.

x	1	2	3	4	5
y	-5	-5	5	5	15

(a) Is it a function?

(b) Domain:

(c) Range:

10.

x	0	5	10	15	20
y	3	6	9	12	15

(a) Is it a function?

(b) Domain:

(c) Range:

11.

x	-9	7	0	3	-4
y	-2	12	-6	7	12

(a) Is it a function?

(b) Domain:

(c) Range:

12.

x	-4	9	2	-4	6
y	-10	8	2	-3	14

(a) Is it a function?

(b) Domain:

(c) Range:

For exercises 13-18, determine whether each relation is a function. Then determine the domain and range.

13.

$\{(0,-7),\ (2,5),\ (-3,1),\ (-8,0)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

14.

$\{(3,-5),\ (8,-6),\ (3,7),\ (5,9)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

15.

$\{(-4,7),\ (2,-3),\ (7,7),\ (-5,1)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

16.

$\{(0,-4),\ (0,2),\ (0,1),\ (0,0)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

17.

$\{(8,-3),\ (2,-3),\ (9,-3),\ (-1,-3)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

18.

$\{(9,-7),\ (4,3),\ (-2,0),\ (9,-1)\}$

(a) Is it a function?

(b) Domain:

(c) Range:

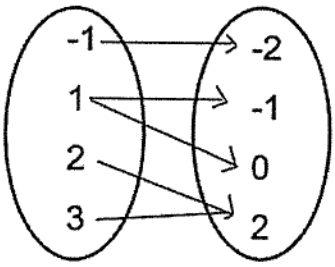
Name: Date: Period:

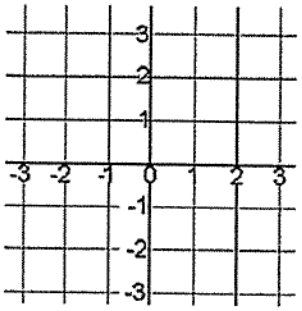
Score:	First attempt due:
	Final corrections due:

Practice Worksheet: Relations & Functions

Use the given form of each relation to complete the other forms. Then determine if the relation is a function.

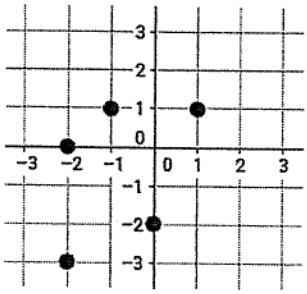
1] Rewrite the relation given in the mapping diagram as a scatterplot.

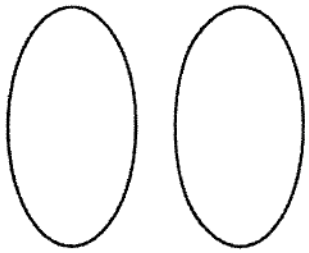




Is the relation also a function?

2] Rewrite the relation given in the scatter plot as a mapping diagram.

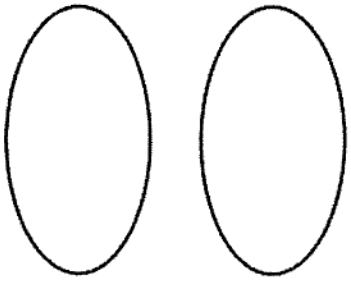




Is the relation also a function?

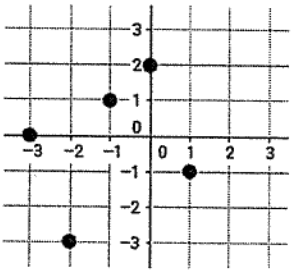
3] Rewrite the relation given in the table as a mapping diagram.

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



Is the relation also a function?

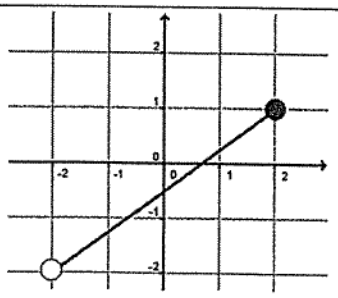
4] Rewrite the relation given in the scatter plot as a **set** of ordered pairs (NOT a table).



Is the relation also a function?

Identify the domain and range, then determine if each graph shows a function or a relation only.

5]

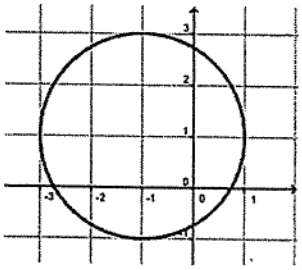


Domain:

Range:

Function?

6]

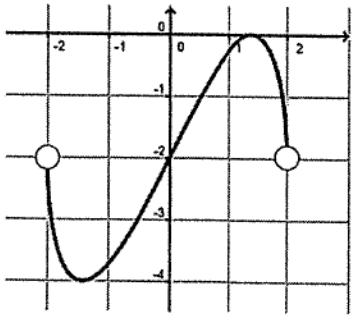


Domain:

Range:

Function?

7]



Domain:

Range:

Function?

Identify the domain and range, then evaluate each function for the given value of x.

8] $f = \{(10,7), (-2,4), (5,3), (4,10)\}$

Domain:

Range:

$f(10) =$

9]

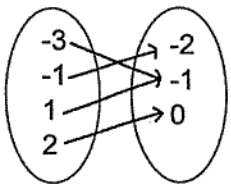
x	y
-3	3
-1	1
0	0
1	1

Domain:

Range:

$f(-1) =$

10]

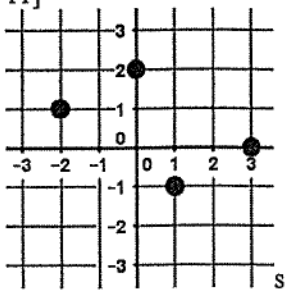


Domain:

Range:

$f(-3) =$

11]

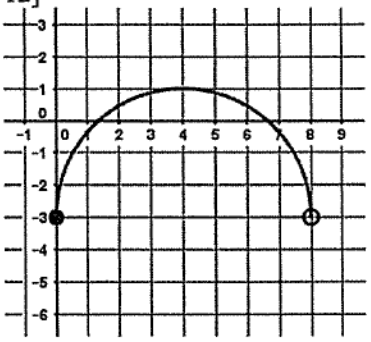


Domain:

Range:

$f(3) =$

12]

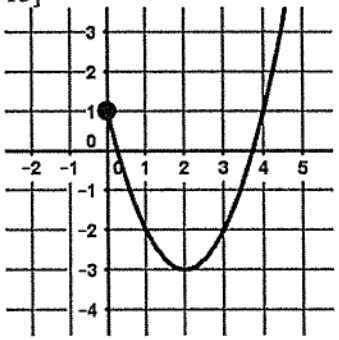


Domain:

Range:

$f(0) =$

13]

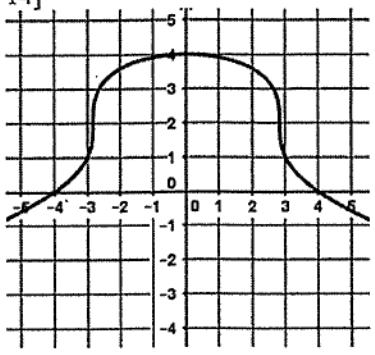


Domain:

Range:

$f(4) =$

14]

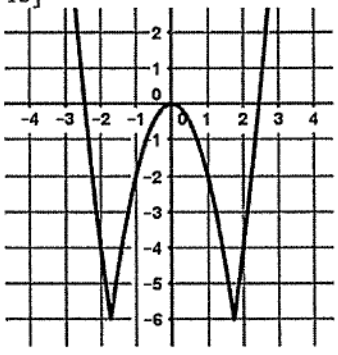


Domain:

Range:

$f(-3) =$

15]

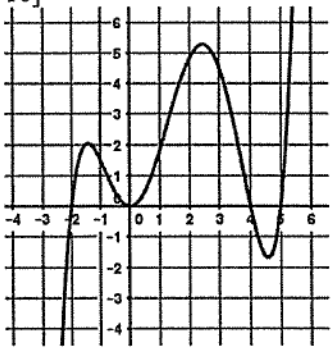


Domain:

Range:

$f(2) =$

16]



Domain:

Range:

$f(-2) =$

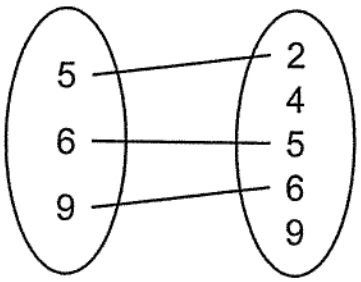
Name : _____ Score : _____

Teacher : _____ Date : _____

Domain and Range Mapping Diagrams

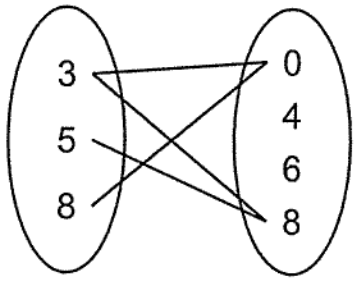
Determine whether each diagram depicts a function or not.

1)



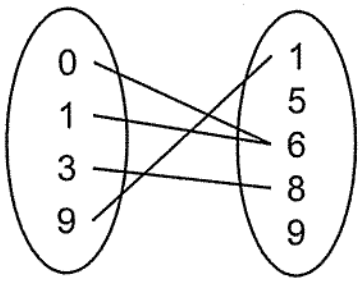
Function: _____

2)



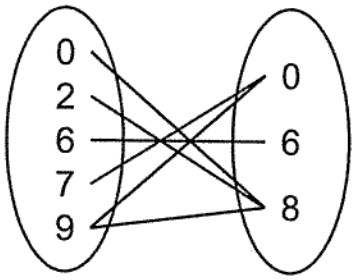
Function: _____

3)



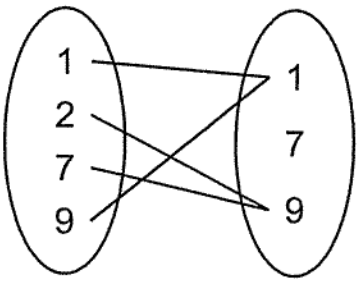
Function: _____

4)



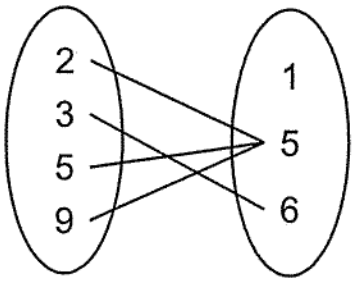
Function: _____

5)



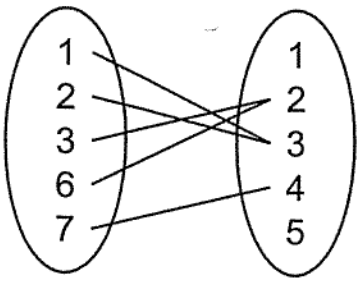
Function: _____

6)



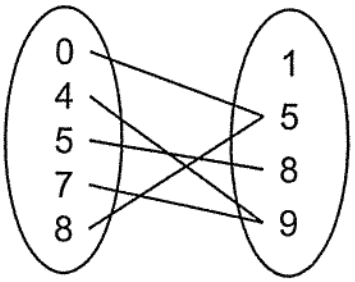
Function: _____

7)



Function: _____

8)



Function: _____