

**Objective 1 – Define the following words.**

1. Relation
2. Function
3. Domain
4. Range

**Objective 2 – Determine whether each relation is a function. If the relation *is* a function, write “YES” on the line provided; if the relation *is not* a function, write “NO” on the line provided.**

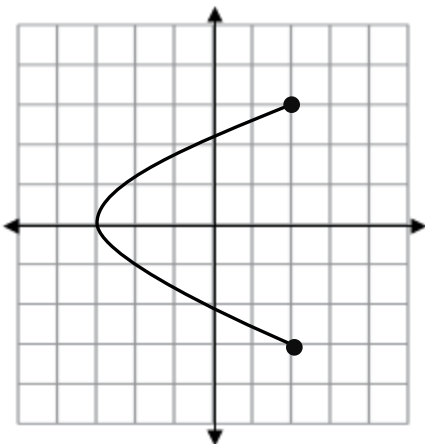
5.  $\{(5, 2), (6, 2), (-5, 5), (-6, 2)\}$  \_\_\_\_\_

6. \_\_\_\_\_

$x$	-7	-5	-3	-1	1
$y$	4	4	4	4	4

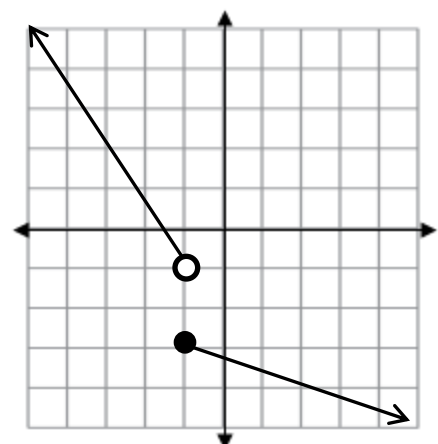
**Objective 3 – Determine whether each relation is a function. If the relation *is* a function, write “YES” on the line provided; if the relation *is not* a function, write “NO” on the line provided.**

7.



\_\_\_\_\_

8.



\_\_\_\_\_

**Objective 4 – State the domain and range for each relation. Write the domain and range in the space provided, using set notation.**

9.  $\{(5, 2), (6, 2), (-5, 5), (-6, 2)\}$

Domain \_\_\_\_\_

Range \_\_\_\_\_

10.

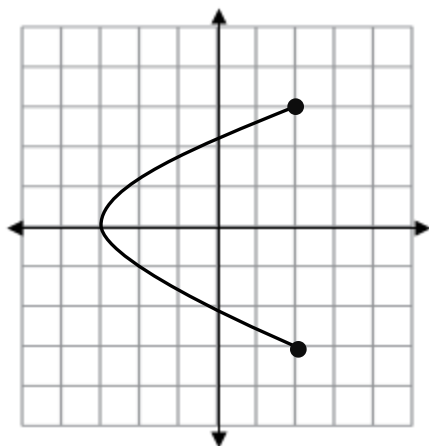
$x$	-7	-5	-3	-1	1
$y$	4	4	4	4	4

Domain \_\_\_\_\_

Range \_\_\_\_\_

**Objective 5 – State the domain and range for each graph. You may use interval notation or inequality signs. Write your answers in the space provided.**

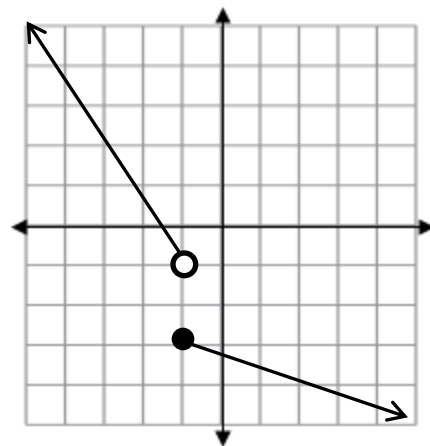
11.



Domain \_\_\_\_\_

Range \_\_\_\_\_

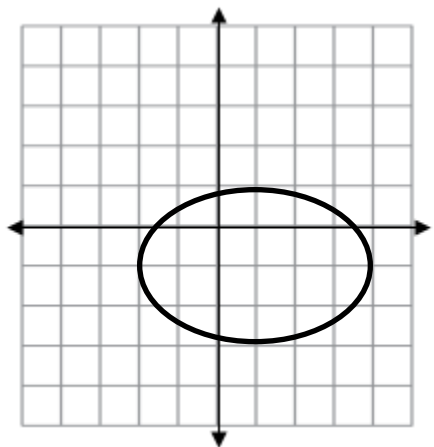
12.



Domain \_\_\_\_\_

Range \_\_\_\_\_

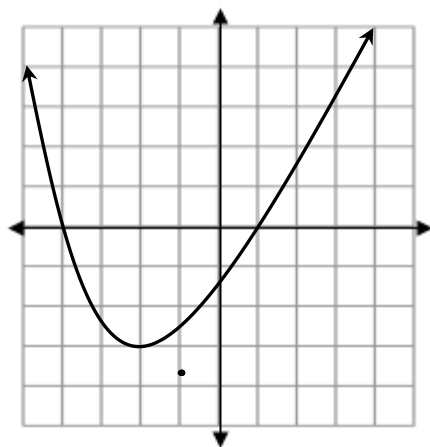
13.



Domain \_\_\_\_\_

Range \_\_\_\_\_

14.



Domain \_\_\_\_\_

Range \_\_\_\_\_

**Objective 6 – Find the pattern in the sequence; then use the pattern to find the next 3 terms in the sequence.**

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15.

$x$	2	4	6	8	10	12
$y$	-2	-8	-14			

16.

$x$	-2	0	2	4	6	8
$y$	5	2	-1			

17.

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

**Objective 7 – Express the pattern in the tables as an equation. Write your final equation on the line provided.**

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18.

$x$	-2	0	2	4	6
$y$	11	8	5	2	-1

Equation: \_\_\_\_\_

19.

$x$	-6	-5	-4	-3	-2
$y$	-5	0	5	10	15

Equation: \_\_\_\_\_

20.

$x$	15	12	9	6	3
$y$	10	9	8	7	6

Equation: \_\_\_\_\_