

## Discrete Relations

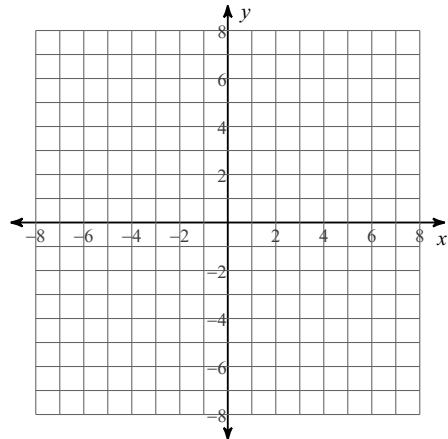
**Each set of ordered pairs represents a relation. Represent the relation as a table.**

1)  $\{(-7, 1), (-3, 0), (-2, -1), (4, 7), (6, 4)\}$

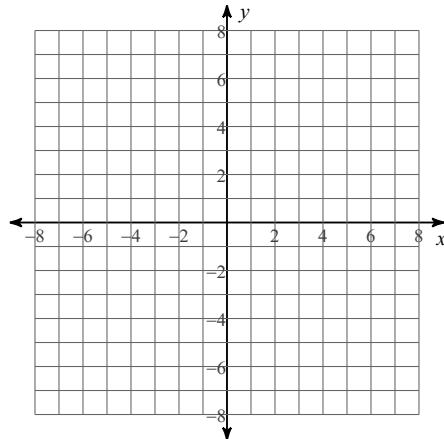
2)  $\{(-1, -2), (0, -3), (0, 2), (6, -2), (7, -7)\}$

**Each set of ordered pairs represents a relation. Represent the relation as a graph.**

3)  $\{(-3, -6), (-1, 6), (0, 4), (5, 3), (7, 1)\}$



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

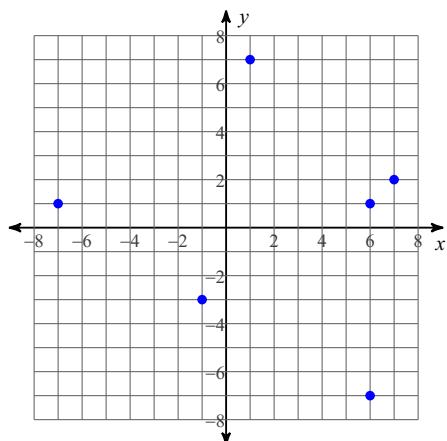
**Each set of ordered pairs represents a relation. Represent the relation as a mapping diagram.**

5)  $\{(-6, -7), (-6, 3), (0, -7), (3, -4), (5, 6)\}$

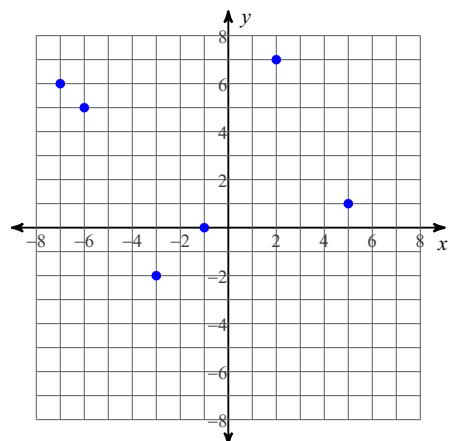
6)  $\{(-6, 7), (-5, 6), (3, 5), (3, -4), (6, 4)\}$

**Each graph represents a relation. Represent the relation as a table, a set of ordered pairs, and a mapping diagram. Then determine the domain/range and if the relation is a function.**

7)



8)



## Discrete Relations

Each set of ordered pairs represents a relation. Represent the relation as a table.

1)  $\{(-7, 1), (-3, 0), (-2, -1), (4, 7), (6, 4)\}$

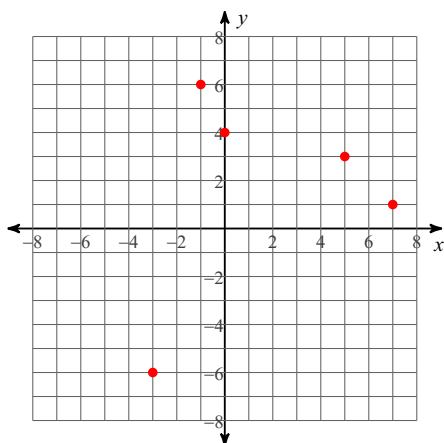
$x$	$y$
-7	1
-3	0
-2	-1
4	7
6	4

2)  $\{(-1, -2), (0, -3), (0, 2), (6, -2), (7, -7)\}$

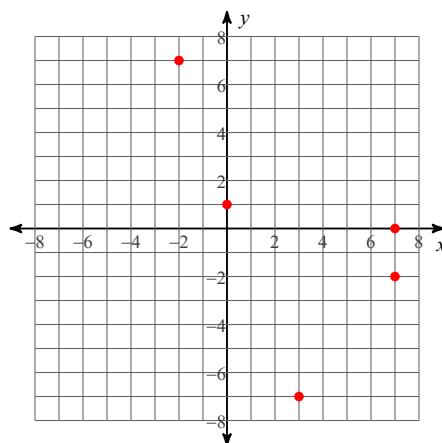
$x$	$y$
-1	-2
0	-3
0	2
6	-2
7	-7

Each set of ordered pairs represents a relation. Represent the relation as a graph.

3)  $\{(-3, -6), (-1, 6), (0, 4), (5, 3), (7, 1)\}$

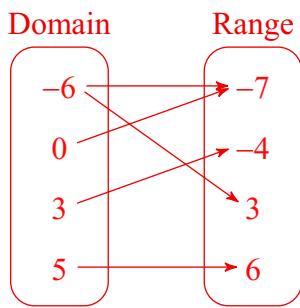


4)  $\{(-2, 7), (0, 1), (3, -7), (7, -2), (7, 0)\}$

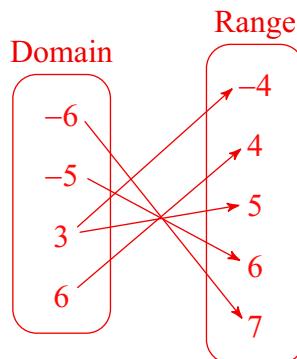


Each set of ordered pairs represents a relation. Represent the relation as a mapping diagram.

5)  $\{(-6, -7), (-6, 3), (0, -7), (3, -4), (5, 6)\}$

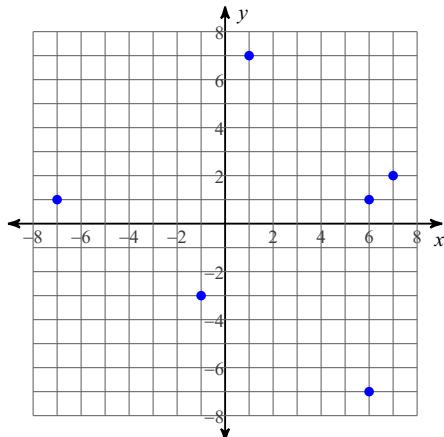


6)  $\{(-6, 7), (-5, 6), (3, 5), (3, -4), (6, 4)\}$

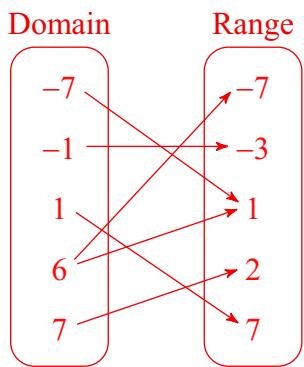


**Each graph represents a relation. Represent the relation as a table, a set of ordered pairs, and a mapping diagram. Then determine the domain/range and if the relation is a function.**

7)



$x$	-7	-1	1	6	6	7
$y$	1	-3	7	1	-7	2



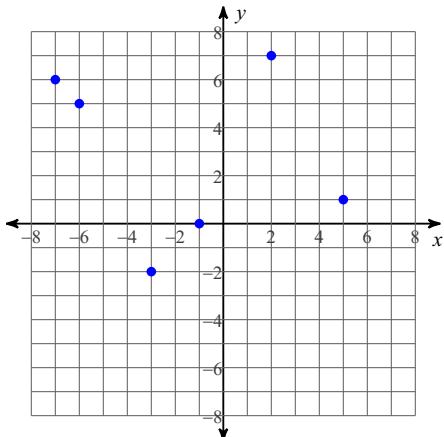
$$\{(-7, 1), (-1, -3), (1, 7), (6, 1), (6, -7), (7, 2)\}$$

Domain:  $\{-7, -1, 1, 6, 7\}$

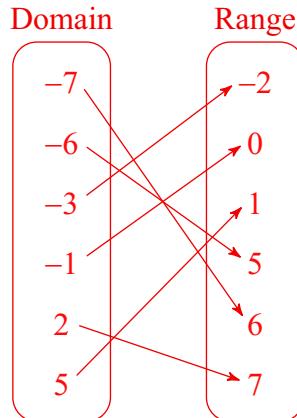
Range:  $\{-7, -3, 1, 2, 7\}$

The relation is not a function.

8)



$x$	-7	-6	-3	-1	2	5
$y$	6	5	-2	0	7	1



$$\{(-7, 6), (-6, 5), (-3, -2), (-1, 0), (2, 7), (5, 1)\}$$

Domain:  $\{-7, -6, -3, -1, 2, 5\}$

Range:  $\{-2, 0, 1, 5, 6, 7\}$

The relation is a function.