

Chapter 4 § 3

Relations

Definition :

Relation – a set of ordered pairs

Domain – the set of the first coordinates
from the ordered pairs in the relation

Range – the set of the second coordinates
from the ordered pairs in the relation

Note:

There are four different ways that relation can be expressed.



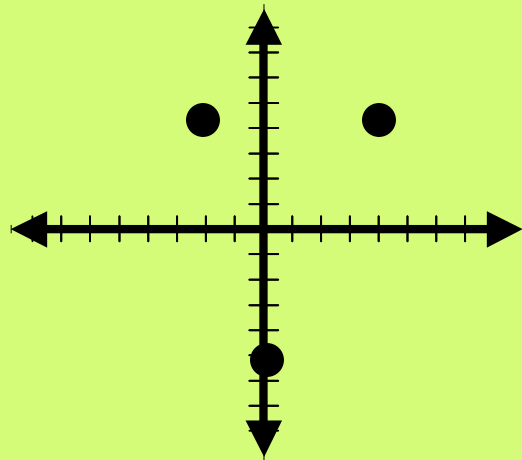
Set of Ordered Pairs

$$\{(4, 4), (-2, 4), (0, -5)\}$$

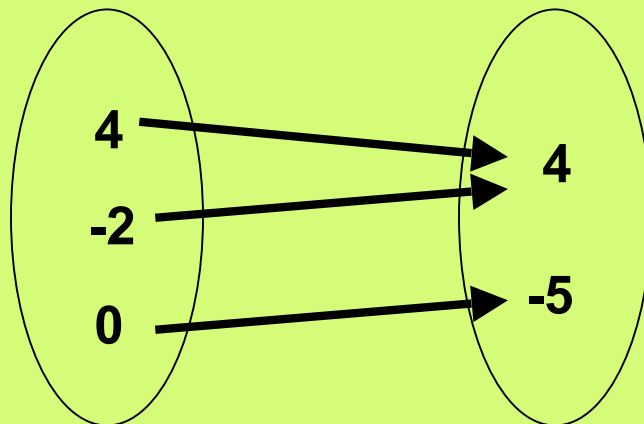
Table

x	y
4	4
-2	4
0	-5

Graph



Mapping



State the domain and the range.

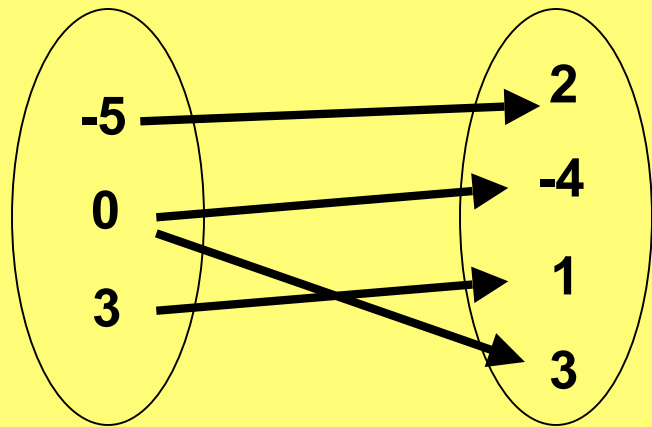
$$\{(-5, 2), (0, -4), (3, 1), (0, 3)\}$$

$$D = -5, 0, 3$$

$$R = -4, 1, 2, 3$$

Express the relation as a Table and a Mapping

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



Express the relation as an inverse.

$$\{(-5, 2), (0, -4), (3, 1), (0, 3)\}$$

$$\{(2, -5), (-4, 0), (1, 3), (3, 0)\}$$