Unit 1 Objective 4 Remediation

Finding Domain and Range given Ordered Pairs

The **domain** is the set of the first coordinates in a set of ordered pairs of a relation or function (usually the *x*-coordinate).

The **range** is the set of the second coordinates in a set of ordered pairs of a relation or function (usually the *y*-coordinate).

Examples

1. State the domain and range: $\{(2,3),\ (3,4),\ (4,5),\ (5,6)\}$
   The domain is all the *x*-coordinates. $D = \{2,3,4,5\}$
   The range is all the *y*-coordinates. $R = \{3,4,5,6\}$

2. State the domain and range: $\{(2,-3),\ (3,-3),\ (4,-5),\ (3,-5)\}$
   The domain is all the *x*-coordinates. $D = \{2,3,4\}$
   The range is all the *y*-coordinates. $R = \{-5,-3\}$

Try These

State the domain and range for each relation.

1. $\{(4,3),\ (-2,10),\ (5,-6),\ (10,7)\}$ 1. _____
2. $\{(-3,-6),\ (-5,10),\ (-1,2),\ (0,0)\}$ 2. _____
3. $\{(-7,4),\ (8,12),\ (9,12),\ (6,13)\}$ 3. _____
4. $\{(7,2),\ (7,3),\ (7,4),\ (7,5)\}$ 4. _____
5. $\{(-5,3),\ (6,5),\ (3,2),\ (10,3)\}$ 5. _____
6. $\{(6,4),\ (-5,2),\ (6,7),\ (-8,8)\}$ 6. _____

Finding Domain and Range given a Table

Examples

State the domain and range for each relation.

1.

x	y
1	–4
5	–3
8	–2
9	–2

Domain is the x-coordinates.

$D = \{1, 5, 8, 9\}$

Range is the y-coordinates.

$R = \{-4, -3, -2\}$

2.

x	y
–7	0
–8	–1
–9	2
–7	–3

Domain is the x-coordinates.

$D = \{-9, -8, -7\}$

Range is the y-coordinates.

$R = \{-3, -1, 0, 2\}$

Try These

State the domain and range for each relation.

1.

x	y
1	6
1	–6
2	8
2	–8

_____

_____

2.

x	y
1	4
2	4
3	4
4	4

_____

_____

3.

x	y
–4	2
–4	3
–4	4
–4	5

_____

_____

4.

x	y
3	2
5	4
7	5
3	7

_____

_____

5.

x	y
0	–5
2	6
9	–3
5	0

_____

_____

6.

x	y
0	–6
–2	–4
4	–2
–6	–2

_____

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