

Exercises

State the domain and range of each relation. Then determine whether each relation is a function

1. Domain: $\{100, 200, 300\}$ Range: $\{50, 100, 150\}$
 Domain: _____
 Range: _____
 Function: yes or no

2. Domain: $\{3\}$ Range: $\{1, 5\}$
 Domain: _____
 Range: _____
 Function: yes or no

3.

1	2
2	4
3	6

 Domain: _____
 Range: _____
 Function: _____

4.
 Function: _____

Graph each relation or equation and determine the domain and range.

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

 Domain: _____
 Range: _____

6. $\{(2, 6), (6, 2)\}$

 Domain: _____
 Range: _____

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

 Domain: _____
 Range: _____

8. $x = -2$

 Domain: _____
 Range: _____

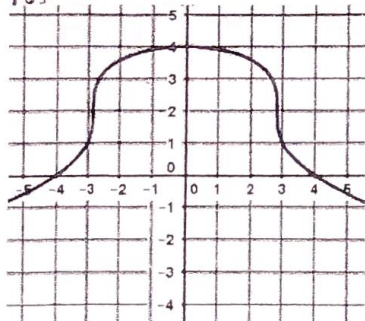
Find each value if $f(x) = 2x - 1$ and $g(x) = 2 - 2x$.

- 9. $f(0)$
- 10. $f(12)$
- 11. $g(4)$
- 12. $f(-2)$
- 13. $g(-1)$
- 14. $f(d)$

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

<p>15. $f = \{(10, 7), (-2, 4), (5, 3), (4, 10)\}$</p> <p>Domain: _____</p> <p>Range: _____</p> <p>$f(10) =$ _____</p>	<p>16.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><th>x</th><th>y</th></tr> <tr><td>-3</td><td>3</td></tr> <tr><td>-1</td><td>1</td></tr> <tr><td>0</td><td>0</td></tr> <tr><td>1</td><td>1</td></tr> </table> <p>Domain: _____</p> <p>Range: _____</p> <p>$f(-1) =$ _____</p>	x	y	-3	3	-1	1	0	0	1	1	<p>17.</p> <p>Domain: _____</p> <p>Range: _____</p> <p>$f(-3) =$ _____</p>
x	y											
-3	3											
-1	1											
0	0											
1	1											

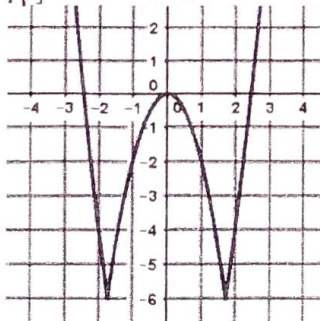
18]



Function?

$$f(-3) =$$

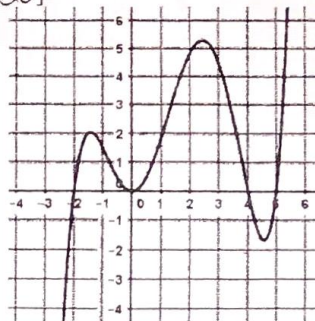
19]



Function?

$$f(2) =$$

20]

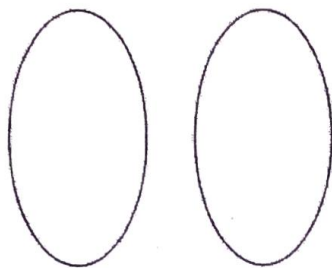


Function?

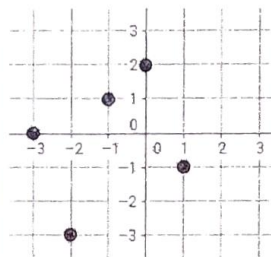
$$f(-2) =$$

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

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



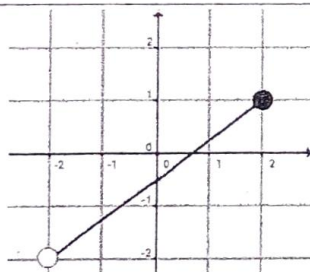
Is the relation also a function?

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

Is the relation also a function?

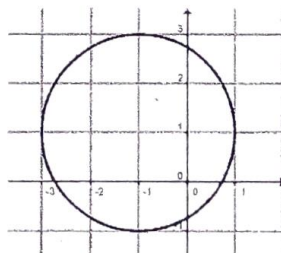
23-25] Determine if each graph shows a function or a relation only.

23]



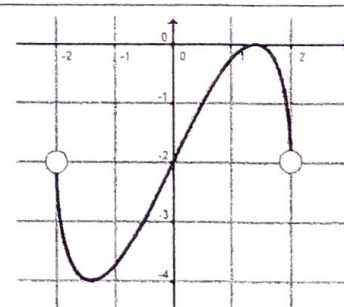
Function?

24]



Function?

25]



Function?