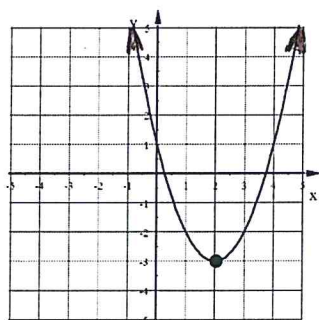


1. Is each of the below a function?

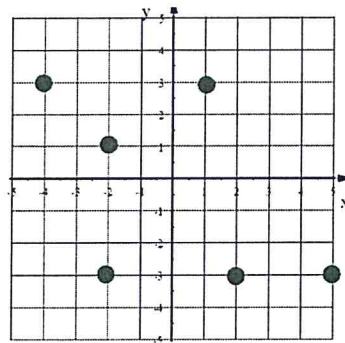
a)

X	Y
-4	9
4	-1
7	4
11	9

b)



c)



d) $(5, 7)(-6, 2)(5, -1)(4, 3)(1, -8)$

2. Use the graphs above.

a) State the Domain and Range for the graph in 1 b).

Domain:

Range:

b) State the Domain and Range for the graph in 1 c).

Domain:

Range:

3. Use these two functions: $f(x) = -2x^2 + 10$

$g(w) = 10 - 3w$

a) Find $f(-3)$

b) Find w when $g(w) = 22$

c) Find $f(2) - g(3)$

d) Find $7g(1)$

1. Is each of the below a function?

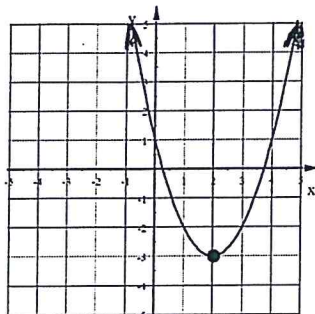
a)

Yes

X	Y
-4	9
4	-1
7	4
11	9

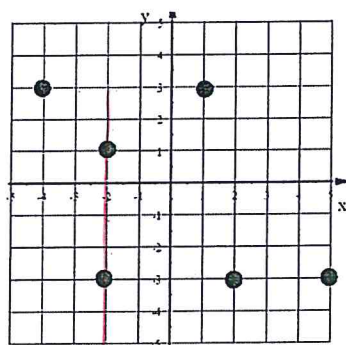
b)

Yes



c)

NO



d) $(5, 7), (-6, 2), (5, -1), (4, 3), (1, -8)$ NO

2. Use the graphs above.

a) State the Domain and Range for the graph in 1 b).

Domain:

ALL REAL
 $\mathbb{R}$

Range:

$y \geq -3$

b) State the Domain and Range for the graph in 1 c).

Domain:

$\{-4, -2, 1, 2, 5\}$

Range:

$\{-3, 1, 3\}$

3. Use these two functions: $f(x) = -2x^2 + 10$

$g(w) = 10 - 3w$

a) Find $f(-3)$

$$= -2(-3)^2 + 10$$

$$= -2(9) + 10$$

$$= -18 + 10$$

$f(-3) = -8$

b) Find w when $g(w) = 22$

$$22 = 10 - 3w$$

$\rightarrow$

$$\frac{12}{-3} = \frac{-3w}{-3}$$

$\rightarrow$

$w = -4$

c) Find $f(2) - g(3)$

$$f(2) = -2(2)^2 + 10 = -2(4) + 10 = -8 + 10 = 2$$

$$g(3) = 10 - 3(3) = 10 - 9 = 1$$

$$f(2) - g(3) = 2 - 1 = 1$$

d) Find $7g(1)$

This means "seven times $g(1)$ "

$$g(1) = 10 - 3(1) = 10 - 3 = 7$$

$$7g(1) = 7 \cdot 7 = 49$$