

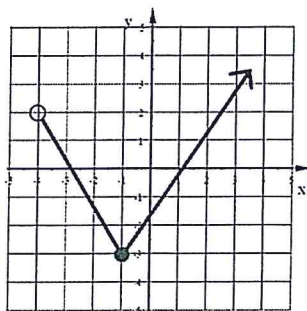
Algebra 1 Bellwork Monday, November 30, 2015

1. Is each of the below a function?

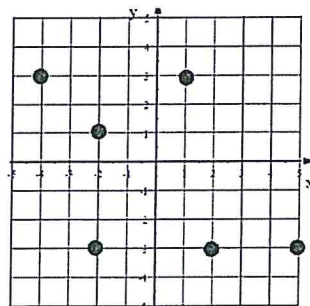
a)

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

b)



c)



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 $3f(2) - 5g(1)$

1. Is each of the below a function?

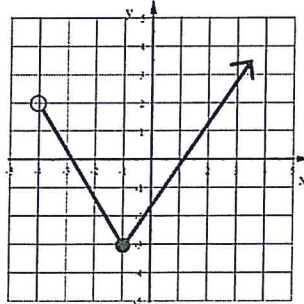
a)

Yes

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

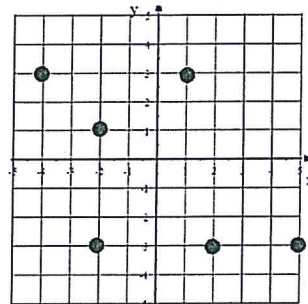
b)

Yes



c)

NO



2. Use the graphs above.

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

Domain:

$$x > -4$$

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 $f(-3)$

$$\begin{aligned} f(-3) &= -2(-3)^2 + 10 \\ &= -2(9) + 10 \\ &= -18 + 10 \end{aligned}$$

$$f(-3) = -8$$

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

$$\begin{aligned} 22 &= 10 - 3w \\ -10 &\quad -10 \end{aligned}$$

$$\begin{aligned} 12 &= -3w \\ -3 &\quad -3 \end{aligned}$$

$$w = -4$$

c) Find $3f(2) - 5g(1)$

$$\begin{aligned} f(2) &= -2(2)^2 + 10 \\ &= -2(4) + 10 \\ &= -8 + 10 \end{aligned}$$

$$f(2) = 2$$

$$3 \cdot f(2) = 6$$

$$\begin{aligned} g(1) &= 10 - 3(1) \\ &= 10 - 3 \end{aligned}$$

$$g(1) = 7$$

$$5 \cdot g(1) = 35$$

$$3 \cdot f(2) - 5 \cdot g(1)$$

$$= 6 - 35$$

$$= -29$$