

FOR LOGO 0902822746



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Answer For Math Unit One

1. B

$$X=1, y=x^2 \Rightarrow y=1^2=1, (1, 1) \in R$$

$$X=2, y=x^2 \Rightarrow y=2^2=4, (2, 4) \in R$$

$$X=3, y=x^2 \Rightarrow y=3^2=9, (3, 9) \in R$$

$$X=4, y=x^2 \Rightarrow y=4^2=16, (4, 16) \in R$$

$$X=5, y=x^2 \Rightarrow y=5^2=25, (5, 25) \in R$$

$$* R = A \times A = \{(1,1), (2,4)\}$$

$$\text{Domain} = \{1,2\}$$

$$\text{Range} = \{1,4\}$$

2. B

So enter $(-2,3)$ to each equation from choice A - D try which will be true

$$2(2)-3=-7$$

3. B

Quadratic function

Function : No domains are paired with more than one range .

4. C

$$\text{odd function; } f(-x) = -f(x)$$

5. B

$$f(xy) = (xy)^2 = x^2y^2$$

$$f(x).f(y) = x^2.y^2 = x^2y^2$$

6. A

$$\pi > 1$$

7. D

$f(x)=x^2$ will be one to one If Domain $= [0, \infty)$ $f(x)=x^2$ will be onto If Range $= [0, \infty)$

8. C

$$f(x) = ax^2 + bx + c, g(x) = 2x - 1$$

$$f \circ g(x) = a(2x-1)^2 + b(2x-1) + c = 4x^2 - 4x + 1$$

$$= a(4x^2 - 4x + 1) + 2bx - b + c = 4x^2 - 4x + 1$$

$$= 4ax^2 - 4ax + a + 2bx - b + c = 4x^2 - 4x + 1$$

$$4ax^2 = 4x^2 \quad a=1$$

$$-4ax + 2bx = -4x$$

$$b=0$$

$$a - b + c = 1$$

$$C=0$$

$$\text{So } f(x) = x^2$$