



1. If $f(x) = (8x+2)$, then find $f(2)$

- (i) 16 (ii) 18 (iii) 19 (iv) 20 (v) 17

2. If $f(x) = (9x+6)$ and $g(y) = (y+6)$, then find $f(9), g(8)$

- (i) 88,15 (ii) 84,11 (iii) 86,13 (iv) 90,17 (v) 87,14

3. If $f: A \rightarrow B$ is defined by $f(x) = (2x+7)$ and $A = \{2,5,4,9\}$, find the range

- (i) $\{11,17,15,25\}$ (ii) $\{-7,11,25,-9,15,17\}$ (iii) $\{25,15,11,17\}$ (iv) $\{44,11,17,15\}$ (v) $\{15,11,17\}$

4. If $f(t) = (5t^2 + 6t + 2)$ then find $f(2x-2)$

- (i) $(20x^2 - 28x + 10)$ (ii) $(17x^2 - 28x + 10)$ (iii) $(19x^2 - 28x + 10)$ (iv) $(21x^2 - 28x + 10)$
(v) $(23x^2 - 28x + 10)$

If $f(x) = (6x+1)$ and $g(x) = (7x^2 + 6x - 3)$,

5. find the value of $\frac{f(6)+f(2)+f(3)}{g(2)+g(3)+g(5)}$

- (i) $\frac{69}{319}$ (ii) $\frac{67}{317}$ (iii) $\frac{23}{105}$ (iv) $\frac{69}{317}$ (v) $\frac{71}{317}$

Find the range of $f: Z \rightarrow Z$ where $f(x) = (9x+2)$

6. and domain of f is $\{x : 1 \leq x \leq 5\}$

- (i) $\{11,29,38,47,18\}$ (ii) $\{11,20,29,47,37\}$ (iii) $\{11,20,29,38,48\}$ (iv) $\{11,20,29,38,47\}$
(v) $\{11,20,38,47,31\}$

Let $f: R \rightarrow R$ be a function defined by given conditions

$$f(x) = (3x+7) \text{ if } x < -2$$

7. $f(x) = (4x+9)$ if $-2 \leq x \leq 1$

$$f(x) = (x+7) \text{ if } x > 1$$

find $f(x)$ where $x = 1$

- (i) 8 (ii) 14 (iii) 13 (iv) 10 (v) 12

8. Find the range of $f: Z \rightarrow Z$ where $f(x) = (3x^2 + 3x + 4)$

and domain of f is $\{x : -4 \leq x \leq 0\}$

- (i) $\{40,22,10,4\}$ (ii) $\{40,22,10,2\}$ (iii) $\{22,10,4,41\}$ (iv) $\{40,10,4,21\}$ (v) $\{40,22,4,12\}$

Assignment Key

1) (ii)

2) (v)

3) (i)

4) (i)

5) (iv)

6) (iv)

7) (iii)

8) (i)