EduSahara™ Assignment

Name : Real Valued Functions

Chapter : Relations and Mapping

Grade : ICSE Grade VIII

1. If $f(x)=(4x+1)$, then find $f(3)$

   (i) 12 (ii) 14 (iii) 16 (iv) 13 (v) 11

2. If $f(x)=(3x+3)$ and $g(y)=(6y+2)$, then find $f(6), g(6)$

   (i) 21,38 (ii) 22,39 (iii) 24,41 (iv) 20,37 (v) 19,35

3. If f:A→B is defined by $f(x)=(2x+7)$ and A $=\{8,6,7,2\}$,
   find the range

   (i) {11,23,19} (ii) {10,-2,19,32} (iii) {21,-15,19,23,11,15} (iv) {23,19,21,11} (v) {21,9,23,11}

4. If $f(t)=(6t^2+8t+1)$ then find $f(6x+2)$

   (i) $(217x^2+192x+41)$ (ii) $(219x^2+192x+41)$ (iii) $(213x^2+192x+41)$ (iv) $(215x^2+192x+41)$

   (v) $(216x^2+192x+41)$

5. If $f(x)=(7x+5)$ and $g(x)=(7x^2+6x+1)$,
   find the value of $\frac{f(-2)+f(-5)+f(-4)}{g(-5)+g(-4)+g(-3)}$

   (i) $(\frac{-62}{283})$ (ii) $(\frac{-62}{281})$ (iii) $(\frac{-60}{281})$ (iv) $(\frac{-64}{281})$ (v) $(\frac{-2}{9})$

6. Find the range of f:Z→Z where $f(x)=(2x+3)$
   and domain of f is $\{x : -3 \le x \le 1\}$

   (i) {-3,-1,3,5} (ii) {-3,-1,1,3,5} (iii) {-1,1,3,5,-4} (iv) {-3,-1,1,3} (v) {-3,1,3,5,0}

7. Let f:R→R be a function defined by given conditions
   $f(x)=(4x+3)$ if x<-5
   $f(x)=(x+7)$ if -5≤x≤1
   $f(x)=(3x+6)$ if x>1
   find $f(x)$ where x = 6

   (i) 27 (ii) 13 (iii) 23 (iv) 24 (v) 25

8. Find the range of f:Z→Z where $f(x)=(3x^2+3x+3)$
   and domain of f is $\{x : 1 \le x \le 5\}$

   (i) {9,21,63,93,40} (ii) {9,21,39,63,91} (iii) {21,39,63,93,11} (iv) {9,39,63,93,20} (v) {9,21,39,63,93}

Assignment Key

1) (iv)	2) (i)	3) (iv)	4) (v)	5) (ii)	6) (ii)
7) (iv)	8) (v)				