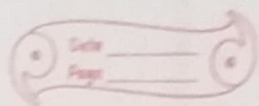


8/Oct/21

Maths

(H.W.)

Ex 20 (A)

Q3 Find the value of :

(i)  $4pq \times 2r$ , when  $p = 5$ ,  $q = 3$ , and  $r = \frac{1}{2}$

$$\Rightarrow 4(5)(3) \times 2\left(\frac{1}{2}\right)$$

$$\Rightarrow 4 \times 5 \times 3 \times 2 \times \frac{1}{2}$$

$$\Rightarrow 60$$

(ii)  $\frac{yz}{z}$ , when  $x = 8$ ,  $y = 4$  and  $z = 16$

$$\Rightarrow \frac{4 \times 16}{16} = \frac{4}{1} = 4$$

$$\Rightarrow \frac{4 \times 8}{16} = \frac{32}{16} = 2$$

(iii)  $\frac{a+b-c}{2a}$ , when  $a = 5$ ,  $b = 7$  and  $c = 2$

$$\Rightarrow \frac{5+7-2}{2(5)} = \frac{5+7-2}{2 \times 5} = \frac{10-2}{10} = \frac{8}{10} = \frac{4}{5}$$

Ex 20 (B)

Q2 Simplify :

(i)  $12x - (5x + 2x)$

$\Rightarrow 12x - 5x - 2x$

$\Rightarrow 12x - 7x = 5x$

(ii)  $10m + (4n - 3n) - 5n$

$\Rightarrow 10m + 4n - 3n - 5n$

$\Rightarrow 10m + (-)$

$\Rightarrow 10m + (-4n) = 10m - 4n$

(iii)  $(15b - 6b) - (3b + 4b)$

$\Rightarrow 15b - 6b - 3b - 4b = -1b$

(iv)  $-(-4a - 8a)$

$\Rightarrow 4a + 8a = 12a$

(v)  $x - (x - y) - (x - x + y)$

$\Rightarrow x - x + y + x - y = x$

(vi)  $p + (-q - r - s) - (p - q - r)$

$\Rightarrow p - q - r - s - p + q + r = -s$

(vii)  $(a + b) - (c + d) - (e - f)$

$\Rightarrow a + b - c - d - e + f$



$$(viii) \quad 3x + (8x - 5x) - (7x - x)$$

$$\Rightarrow 3x + 8x - 5x - 7x + x$$

$$\Rightarrow -2x \quad 0$$

~~viii~~

$$(ix) \quad a - (a - b - c)$$

$$\Rightarrow a - a + b + c = b + c$$

$$(x) \quad 6a^2 + (2a^2 - a^2) - (a^2 - b^2)$$

$$\Rightarrow 6a^2 + 2a^2 - a^2 + a^2 + b^2$$

$$\Rightarrow \cancel{8a^2} + b^2 \quad 6a^2 + 2a^2 - a^2 + b^2$$

$$\Rightarrow 6a^2 + b^2$$

$$(xi) \quad 2m - (3m + 2n - 6n)$$

$$\Rightarrow 2m - 3m - 2n + 6n$$

$$\Rightarrow -1m + 4n$$

$$(xii) \quad -m - n - (-m) - m$$

$$\Rightarrow -m - n + m - m = -m - n$$

$$(xiii) \quad x + y - (x + y - x)$$

$$\Rightarrow x + y - (x + y - x)$$

$$\Rightarrow \cancel{x+y} - \cancel{x} - \cancel{y} + x = x$$

(xiv)  $25y - (5x - 10y + 6x - 3y)$

$\Rightarrow 25y - 5x + 10y - 6x + 3y$   
 $\Rightarrow 25y - 5x + 10y - 6x + 3y$   
 $\Rightarrow 25y + 10y + 3y - 5x - 6x$   
 $\Rightarrow 38y - 11x$

(xv)  $3x + 2x - 2x$

(xvi)  $3x + (2x - x + 2)$

$\Rightarrow 3x + (2x - x + 2)$   
 $\Rightarrow 3x + 2x - x + 2$   
 $\Rightarrow 4x + 2$

(xvii)  $a - (2a - 4a + 3a)$

$\Rightarrow a - (2a - 4a + 3a)$   
 $\Rightarrow a - 2a + 4a + 3a$   
 $\Rightarrow 4a$

(xviii)  $5x^2 - (3x - x^2 - 4)$

$\Rightarrow 5x^2 - 3x + x^2 + 4$   
 $\Rightarrow 6x^2 - 3x + 4$

(xix)  $-(y - x) - (x + y - 2x + y)$

$\Rightarrow -y + x - x - y +$   
 $\Rightarrow -(y - x) - (x + y - 2x - y)$   
 $\Rightarrow -y + x - x - y + 2x + y = -y + 2x$



Ex 20(c)

1. FIB :

$$i) 2a + b - c = 2a + (b - c)$$

$$ii) 3x - z + y = 3x - (z - y)$$

$$iii) 6p - 5x + q = 6p - (5x + q) - (5x + q)$$

$$iv) a + b - c + d = a + (b - c + d)$$

$$v) 5a + 4b + 4x - 2c = 4x - (2c - 5a - 4b)$$

$$vi) 7x + 2z + 4y - 3 = -3 + 4y + (2z + 7x)$$

$$vii) 3m - 2n + 6 = 6 - (2n - 3m) - (2n - 3m)$$

$$viii) 2t + r - p - q + s = 2t + r - (p + q - s)$$

