Hw- 8-10-2021
Ex-20(A)

3. Find the value of:

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

$60 \times 1 = 60$

(ii) $\frac{yz}{2}$, when $x=8$, $y=4$ and $z=16$

$\frac{32}{16} = 2$

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

$= \frac{35-25}{10} = \frac{30}{10} = 30$

Ex- 2(B)

BODMAS

2. Simplify:

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

$= 12x-7x$

$= 5x$ (Ans.)

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

$10m+1n-5n$

$= 10m-4n$

(iii) $(15b-6b)-(8b+4b)$

$= 9b-(8b+4b)$

$= 9b-12b$

$= -3b$

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

$= 12a$

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

$= x-x+y+x-y$

$= x$

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

$= P-q-r-s-P+q+r$

$= P-P-q+q-r+r+s$

$= -s$

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

$= a+b-c-d-e+f$

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

$=3x+8x-5x-7x+x$

$=-1x+x$

$=0$

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

$a-a+b+c$

$=b+c$

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

$=6a^2+2a^2-a^2-a^2+b^2$

$=6+b^2$

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

$=2m-3m-2n+6n$

$=-m-2n+6n$

$=-m-4n$

(xii) $-m-n-(-m)-m$

$=-m-n+m-m$

$=-m+m-m-n$

$=-m-n$

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

$=x+y-(x+y-x)$

$=x+y-y$

$=x$

(xiv)

BODMAS

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

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

$\Rightarrow 3x + x + 2$

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

$= 3x + 2x - x - 2$

$= 5x - x - 2$

$= 4x - 2$

$= 3x + x - 2$

$\Rightarrow 4x - 2$

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

$= a - (2a - 7a)$

$= a - (-5a)$

$= 6a$

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

$= 5x^2 - (3x - x^2 + 4)$

$= 5x^2 - 3x + x^2 - 4$

$= 5x^2 + x^2 - 3x - 4$

$= 7x^2 - 3x - 4$

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

$= -y + x - x - y - 2x - y$

$= x - x - y - y - y - 2x$

$= 2x - y$

Ex 20 (C)

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

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

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

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

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

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

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

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