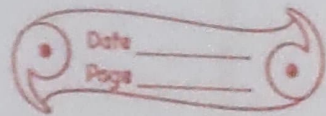


Fundamental Operation



(i) $5+4=9$ and $5x+4x=9x$

(ii) $12+18=30$ and $12x^2y+18x^2y=30x^2y$

(iii) $7+16=23$ and $7a+16b=7a+16b$

(iv) $1+3=4$ and $1x^2y+3x^2y=3x^2y$

(v) $7-4=3$ and $7ab-4ab=3ab$

(vi) $12-5=7$ and $12x-5x=7x$

(vii) $35-16=19$ and $35ab-16ab=19ab$

(viii) $28-13=15$ and $28a^2x-12a^2x=16a^2x$

$-12a^2x$

i) The sum of -2 and $-5 = -7$ and the sum of $-2x$ and $-5x = -7x$.

ii) The sum of 8 and -3 is 5 and the sum of $8ab$ and $3ab$ is $5ab$.

(iii) The sum of -15 and $-4 = -19$ and the sum of $-15x$ and $-4y = -15x$ and $-4y$

(iv) $15+8+3 = 26$ and $15x+8y+3x = 15x+8y+3x$

(v) $12-9+15 = 18$ and $12ab-9ab+15ba = 12ab-9ab+15ba$

(vi) $25-7-9 = 9$ and $25xy-7xy-9yx = 25xy-7xy-9yx$

(vii) $-4-6-5 = -15$ and $-4ax-6ax-5ay = -4ax-6ax-5ay$

3) (i) $8xy$ and $3xy = 11xy$

(ii) $2xyz$, xyz and $6xyz = 9xyz$

(iii) $2a$, $3a$ and $4b = 5a+4b$

(iv) $3x$ and $2y = 3x+2y$

(v) $5m$, $3n$ and $4p = 5m+3n+4p$

$$(vi) 6a, 3a \text{ and } 9ab = 9a + 9ab$$

$$(vii) 3p, 4p \text{ and } 9p = 16p$$

$$(viii) 5ab, 4ba \text{ and } 6b = 5ab + 4ba + 6b$$

$$(ix) 50pq, 30pq \text{ and } 10pr = 80pq + 10pr$$

$$(x) -2y, -y, -3y = -6y$$

$$(xi) -3b \text{ and } -b = -4b$$

$$(xii) 5b, -4b \text{ and } -10b = -9b$$

$$(xiii) -2c, -c \text{ and } -5c = -8c$$

$$4) (i) 6a - a - 5a - 2a = -2a$$

$$(ii) 2b - 3b - b + 4b = 2b$$

$$(iii) 3x - 2x - 4x + 7x = 4x$$

$$(iv) 5ab + 2ab - 6ab + ab = 2ab$$

$$\begin{aligned} \text{(v)} \quad & 8x - 5y - 3x + 10y \\ &= 8x - 3x - 5y + 10y \\ &= 5x + 5y \end{aligned}$$

$$\text{Si)} \quad -7x + 9x + 2x - 2x = 2x$$

$$\begin{aligned} \text{(ii)} \quad & 5ab - 2ab - 8ab + 6ab = (5 - 2 - 8 + 6)ab \\ &= 1ab \end{aligned}$$

$$\begin{aligned} \text{(iii)} \quad & -8a - 3a + 12a + 13a - 6a \\ &= (-8 - 3 + 12 + 13 - 6)a \\ &= 24a \end{aligned}$$

$$\begin{aligned} \text{(iv)} \quad & 19abc - 11abc - 12abc + 14abc \\ &= (19 - 11 - 12 + 14)abc \\ &= 10abc \end{aligned}$$