

Ex-19(A)

1) Fill in the blanks:

i) $5+4 = \underline{9}$ and $5x+4x = \underline{9x}$

ii) $12+18 = \underline{30}$ and $12x^2y+18x^2y = \underline{30x^2y}$

iii) $7+16 = \underline{23}$ and $7a+16b = \underline{7a+16b}$

iv) $1+3 = \underline{4}$ and $x^2y+3xy^2 = \underline{x^2y+3xy^2}$

~~v) 2 and $2ab$~~

v) $7-4 = \underline{3}$ and $7ab-4ab = \underline{3ab}$

vi) $12-5 = \underline{7}$ and $12x-5y = \underline{12x-5y}$

vii) $35-16 = \underline{19}$ and $35ab-16ab = \underline{19ab}$

viii) $28-13 = \underline{15}$ and $28ax^2-13a^2x = \underline{28ax^2-13a^2x}$

2) Fill in the blanks:

i) The sum of -2 and $-5 = \underline{-7}$ and the sum of $-2x$ and $-5x = \underline{-7x}$

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

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

iv) $15 + 8 + 3 =$ 26 and $15x + 8y + 3x =$ $18x + 8y$

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

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

vii) $4 - 6 - 5 =$ -15 and $4ax - 6ax - 5ax =$ $-10ax - 5ax$

(3) Add:

i) $8xy$ and $3xy =$ ~~6000~~ $11xy$

~~ii) $2xyz, xyz$ and $6xyz =$~~

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

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

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

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

~~vi) $6a, 3a, 9a =$~~

vi) $6a, 3a, 9ab =$ $a + 9ab$

vii) $3p, 4q, 9q =$ $3p + 13q$

viii) $5ab, 4ba, 6b =$ $9ab + 6b$

ix) $50pq, 30pq$ and $10pr =$ $80pq + 10pr$

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

$$xi) 3b, -b = -4b$$

$$xii) 5b, -4b, -10b = -9b$$

$$xiii) -2c, -c, -5c = -8c$$

4) Evaluate \Rightarrow

$$i) 6a - a - 5a - 2a$$

$$A) -2a$$

$$ii) 2b - 3b - b + 4b = 2b + 4b - (3+1)b = 6b - 4b = 2b$$

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

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

$$= 10x - 6x = 4x$$

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

$$= 5ab + 2ab + ab - 6ab - 6ab = 2ab$$

$$v) 8x - 5y - 3x + 10y$$

$$= 8x - 3x + 10y - 5y$$

$$= 5x + 5y$$

5) Evaluate \Rightarrow

$$i) -7x + 9x + 2x - 2x$$

$$A) = 9x + 2x - 7x - 2x$$

$$= 11x - 9x = 2x$$

$$\begin{aligned} \text{ii) } \underline{\text{Ans}} & \quad \cancel{4a} + 3b - 2a - b \\ & = 4a - 2a + 3b - b \\ & = 2a + 2b \end{aligned}$$

$$\begin{aligned} \text{iii) } \underline{\text{Ans}} & = 2xy + 5xy - 6xy + 4yz + 3yz \\ & = 7xy - 6xy + 7yz \\ & = x + 7yz \end{aligned}$$

$$\begin{aligned} \text{iv) } \underline{\text{Ans}} & \quad ab + 15ab - 11ab - 2ab \\ & = 16ab - 13ab = 3ab \end{aligned}$$

$$\begin{aligned} \text{v) } \underline{\text{Ans}} & \quad 6a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2 \\ & = 6a^2 + 2a^2 - 4a^2 + 5b^2 - 3b^2 \\ & = 4a^2 + 2b^2 \end{aligned}$$

$$\begin{aligned} \text{vi) } \underline{\text{Ans}} & = 8abc - 4abc + 2ab + ab \\ & = 4abc + 3ab \end{aligned}$$

$$\begin{aligned} \text{vii) } & \quad 9xyz + 15yxz - 10zyx - 2zxy \\ & = 9xyz + 15xyz - 10xyz - 2xyz \\ & = 24xyz - 12xyz = \boxed{12xyz} \end{aligned}$$