

## Ex-19(A)

1. (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  $x^2y+3xy^2=x^2y+3xy^2$

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

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

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

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

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  $-3 = \underline{5}$ ..... and the sum of  $8ab$  and  $-3ab = \underline{5ab}$ .....

(iii) The sum of  $-15$  and  $-4 = \underline{-19}$ ..... and the sum of  $-15x$  and  $-4y = \underline{-15x + (-4y)}$

(iv)  $15 + 8 + 3 = \underline{26}$ ..... and  $15x + 8y + 3x = \underline{18x + 8y}$

(v)  $12 - 9 + 15 = \underline{18}$ ..... and  $12ab - 9ab + 15ba = \underline{18ab}$ .....

(vi)  $25 - 7 - 9 = \underline{9}$ ..... and  $25xy - 7xy - 9yx = \underline{9xy}$ .....

(vii)  $-4 - 6 - 5 = \underline{-15}$ ..... and  $-4ax - 6ax - 5ay = \underline{-4ax - 6ax - 5ay}$

$$3. (i) 8xy \text{ and } 3xy \\ = (8+3)xy \\ = 11xy$$

~~(ii)  $2xyz +$~~

$$(ii) 2xyz + xyz + 6xyz \\ = 9xyz$$

$$(iii) 2a, 3a \text{ and } 4b \\ = 5a + 4b$$

$$(iv) 3x \text{ and } 2y \\ = 3x + 2y$$

$$(v) 5m, 3n \text{ and } 4p \\ = 5m + 3n + 4p$$

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

$$(vii) 3p, 4q \text{ and } 9q \\ = 3p + 13q$$

$$(viii) 5ab, 4ba \text{ and } 6b \\ = 9ab + 6b$$

~~(ix)  $50pq, 30pq \text{ and } 10pr$~~ 

$$= 80pq + 10pr$$

$$(x) -2y, -y \text{ and } -3y \\ = (-2 + (-1) + (-3))y \\ = -6y$$

$$(xi) -3b \text{ and } -b \\ = (-3 + (-1))b \\ = -4b$$

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

$$(xiii) -2c, -c \text{ and } -5c \\ = (-2 + (-1) + (-5))c \\ = -8c$$

~~$4a - a - 5a - 2a$~~ 

$$= -2a$$

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

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

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

$$(v) 8x - 5y - 3x + 10y \\ = 5x + 5y$$

~~5.~~ (i)  $-7x + 9x + 2x - 2x \\ = (-7 + 9 + 2 - 2)x \\ = 2x$

$$(ii) 5ab - 2ab - 8ab + 6ab \\ = (5 - 2 - 8 + 6)ab \\ = 1ab = ab$$

$$(iii) -8a - 3a + 12a + 13a - 6a \\ = (-8 - 3 + 12 + 13 - 6)a \\ = 8a$$

$$(iv) 19abc - 11abc - 12abc + 14abc \\ = (19 - 11 - 12 + 14)abc \\ = 10abc$$

$$6. (i) 6ba - 4ab \\ = (6 - 4)ab \\ = 2ab$$

$$(ii) \quad 6.8b - 4.8b \\ (6.8 - 4.8)b \\ = 2b$$

$$(iii) \quad 10.5abc - 3.5abc \\ = 7abc$$

$$(iv) \quad 8\frac{1}{2}nm - 3\frac{1}{2}mn \\ = (8\frac{1}{2} - 3\frac{1}{2})mn \\ = 5mn$$

$$7. (i) \quad 2a^2b^2 + 5ab^2 + 8a^2b^2 - 3ab^2 \quad \text{---} \\ = 10a^2b^2 + 2ab^2$$

$$(ii) \quad 4a + 3b - 2a - b \\ = 2a + 2b$$

$$(iii) \quad 2xy + 4yz - 4yz + 5xy + 3yz - 6xy \\ = -4xy + 7yz$$

$$(iv) \quad ab + 15ab - 14ab - 2ab \\ = (1 + 15 - 14 - 2)ab \\ = 3ab$$

$$(v) \quad 6a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2 \\ = 4a^2 + 2b^2$$

$$(vi) \quad 8abc + 2ab - 4abc + ab \\ = 4abc + 3ab$$

$$(vii) \quad 9xyz + 15yxz - 10zyx - 2zxy \\ = (9 + 15 - 10 - 2)xyz \\ = 12xyz$$

$$(viii) \quad 13pqr + 2p + 4q - 6pqr + 5pqr \\ = 24pqr + 2p + 4q = 12pqr + 2p + 4q$$

$$(ix) \quad 4ab + 0 - 2ba \\ = 2ba + 0$$

$$(x) \quad 6x^2y - 2xy^2 + 5x^2y - xy^2 \\ = 11x^2y - 3xy^2$$