CW

86	07	21

Ch 19

Fundamental Operations

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 $-7a+16b =$ ans. itself

(iv) $1-13 = -11$ and $x^2y + 3xy^2 =$ ans. itself

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

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

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

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

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

(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 $-4y =$ ans. itself

(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 $25xy - 7xy - 9yx =$ ~~$18xy - 9yx$~~

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

3.(i) $8xy + 3xy = 11xy$

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

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

(iv) $3x + 2y =$ (not possible)

(v) $5m + 3n + 4p =$ (not possible)

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

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

(viii) $5ab + 4ba + 6b =$ ~~(not possible)~~ $9ab + 6b$

(ix) $50pq + 30pq + 10pr = 80pq + 10pr$

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

(xi) $-3b + -b = -4b$

(xii) $5b + (-4b) + (-10b) = -9b$

(xiii) $-2c + -c + -5c = -8c$

HW - Q.3 - 7 Q (19 (A))

4. (i) $6a - a - 5a - 2a = -2a$
(ii) $2b - 3b - b + 4b = 2b$
(iii) $3x - 2x - 4x + 7x = 4x$
(iv) $5ab + 2ab - 6ab + ab = 2ab$
(v) $8x - 5y - 3x + 10y = 5x + 5y$

5. (i) $-7x + 9x + 2x - 2x = 2x$
(ii) $5ab - 2ab - 8ab + 6ab = ab$
(iii) $-8a - 3a + 12a + 13a - 6a = 8a$
(iv) $19abc - 11abc - 12abc + 14abc = 10abc$

6. (i) $6ab - 4ab = 2ab$
(ii) $6 \cdot 8b - 4 \cdot 8b = 2b$
(iii) $10 \cdot 5abc - 3 \cdot 5abc = 7abc$
(iv) $8\frac{1}{2}mn - 3\frac{1}{2}nm = 5mn$

7. (i) $2a^2b^2 + 5ab^2 + 8a^2b^2 - 3ab^2 = 10a^2b^2 + 2ab^2$
(ii) $4a + 3b - 2a - b = 2a + 2b$
(iii) $2xy + 4yz + 5xy + 3yz - 6xy = x + 7yz$
(iv) $ab + 15ab - 11ab - 2ab = 3ab$
(v) $8abc + 2ab - 4abc + ab = 4abc + 3ab$
(vi) $6a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2 = 4a^2 + 2b^2$
(vii) $9xyz + 15yxz - 10zyx - 2zxy = 12xyz$
(viii) $73pqr + 2p + 4q - 6pqr + 5pqr = 12pqr + 2p + 4q$
(ix) $4ab + 0 - 2ba = 2ab$
(x) $6x^2y - 2xy^2 + 5x^2y - xy^2 = 11x^2y - 3xy^2$
(xi) $6 \cdot 4a + 5 \cdot 3b - 2 \cdot 4a - 2 \cdot 2b = 4a + 3 \cdot 1b$
(xii) $2 \cdot 5a + 4 \cdot 6b + 1 \cdot 2a - 3 \cdot 6b = 3 \cdot 7a + b$
(xiii) $22m - 12\frac{1}{2}n - 15p + 16n = 22m + 3\frac{1}{2}n - 15p$
(xiv) $6p + \frac{2}{3}q - 1\frac{1}{2}p + \frac{1}{3}q + 2q = 4\frac{1}{2}p + 3q$
(xv) $2\frac{2}{3}xy - 3\frac{1}{2}xy + 3\frac{1}{3}xy - 2\frac{1}{2}xy = 0$