

20. A

3. i)  $\cancel{4pq} \times 2r = (4 \times 5 \times 3) \times (2 \times \frac{1}{2})$   
 $= 60 \times \cancel{\frac{2}{2}} = 1$   
 $= 60$

ii)  $\frac{yz}{z} = \frac{4 \times 8}{16} = \frac{32}{16} = 2$

iii)  $\frac{a+b-c}{2a} = \frac{5+7-2}{2 \times 5} = \frac{10}{10} = 1$

$$\textcircled{2}. \text{i.) } 12x - (5x + 2x) = \cancel{12x} - \cancel{5x} - \cancel{2x} \quad 12x - 7x \\ = 5x$$

$$\text{ii.) } 10m + (4n - 3n) - 5n = 10m + n - 5n = 10m - 4n$$

$$\text{iii.) } (15b - 6b) - (8b + 4b) = 9b - 12b = -3b$$

$$\text{iv.) } -(-4a - 8a) = -(-12a) = 12a$$

$$\text{v.) } x - (x - y) - (-x + y) = x - x + y + x - y = x$$

$$\text{vi.) } p + (-q - r - s) - (p - q - r) = p - q - r - s - p + q + r = p - p - q + q - r + r - s \\ = -s$$

$$\text{vii.) } (a + b) - (c + d) - (e - f) = a + b - c - d - e + f$$

$$\text{viii.) } 3x + (8x - 5x) - (7x - x) = 3x + 3x - 6x = 0$$

$$\text{ix.) } a - (a - b - c) = a - a + b + c = b + c$$

$$\text{x.) } 6a^2 + (2a^2 - a^2) - (a^2 - b^2) = 6a^2 + a^2 - a^2 + b^2 \\ = 6a^2 + b^2$$

$$\text{xii.) } 2m - (3m + 2n - 6n) = 2m - (3m - 4n) = 2m - 3m + 4n = \frac{4n-m}{m+4n}$$

$$\text{xiii.) } -m - n - (-m) - m = -m - n + m - m = -n - m$$

$$\text{xiv.) } x + y - (x + \overline{y - x}) = x + y - (x + y - x) = x + y - x - y + x = x$$

$$\text{xv.) } 25y - (5x - 10y + 6x - 3y) = 25y - (11x - 13y) = 25y - 11x + 13y \\ = 25y + 13y - 11x = 38y - 11x$$

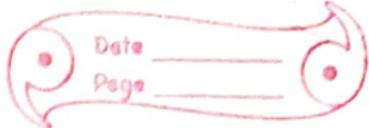
$$\text{xvi.) } 3x + (2x - \overline{x+2}) = 3x + (2x - x - 2) = 3x + x - 2 = 4x - 2$$

$$\text{xvii.) } a - (2a - \overline{4a + 3a}) = a - (2a - 7a) = a - (-5a) = a + 5a = 6a$$

$$\text{xviii.) } 5x^2 - (3x - \overline{x^2 - 4}) = 5x^2 - (3x - x^2 + 4) = 5x^2 - 3x + x^2 - 4 \\ = 5x^2 + x^2 - 3x - 4 = 6x^2 - 3x - 4$$

$$\text{xix.) } -(y - x) - (x + y - \overline{2x + y}) = -(y - x) - (x + y - 2x - y) \\ = -(y - x) - (-x) = -y + x + x = 2x - y$$

## 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.)  $5a + 4b + 4x - 2c = 4x - (4b - 5a + 2c)$
- vi.)  $7x + 2z + 4y - 3 = -3 + 4y + (7x + 2z)$
- vii.)  $3m - 2n + 6 = 6 - (3m + 2n)$
- viii.)  $2t + r - p - q + s = 2t + r - (p + q - s)$