

2008



$$\begin{aligned} \text{i) } (23-15)+4 \\ = 23-15+4 \\ = 12 \end{aligned}$$

$$\begin{aligned} \text{ii) } 5x+(3x+7x) \\ = 5x+3x+7x \\ = 15x \end{aligned}$$

$$\begin{aligned} \text{iii) } 6m-(4m-m) \\ = 6m-4m+m \\ = 3m \end{aligned}$$

$$\begin{aligned} \text{iv) } (9a-3a)+4a \\ = 9a-3a+4a \\ = 10a \end{aligned}$$

$$\begin{aligned} \text{v) } 35b-(16b+9b) \\ = 35b-16b-9b \\ = 10b \end{aligned}$$

$$\begin{aligned} \text{vi) } (3y+8y)-5y \\ = 3y+8y-5y \\ = 6y \end{aligned}$$

$$\begin{aligned} \text{2) } 12x-(5x+2x) \\ = 12x-5x-2x \\ = 5x \end{aligned}$$

$$\begin{aligned} \text{ii) } 100m+(4n-3m)-5n \\ = 100m+4n-3m-5n \\ = 10m-4n \end{aligned}$$

$$\begin{aligned} \text{iii) } (15b-6b)-(8b+4b) \\ = 15b-6b-8b-4b \\ = -3b \end{aligned}$$

$$\begin{aligned} \text{iv) } -(-4a-8a) \\ = +4a+8a \\ = 12a \end{aligned}$$

$$\begin{aligned} \text{v) } x-(x-y)-(-x+y) \\ = x-x+y+x-y \\ = x \end{aligned}$$

$$\begin{aligned} \text{vi) } p+(-q-r-s)-(p-q-r) \\ = p-q-r-s-p+q+r \\ = -s \end{aligned}$$

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

$$\begin{aligned} \text{viii) } 3x+(8x-5x)-(7x-x) \\ = 3x+8x-5x-7x+x \\ = 0 \end{aligned}$$

$$\begin{aligned} \text{ix) } a-(a-b-c) \\ = a-a+b+c \\ = b+c \end{aligned}$$

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

$$\begin{aligned} \text{x i)} \quad & 2m - (3m + 2n) - 6n \\ & = 2m - 3m - 2n + 6n \\ & = 4n - m \end{aligned}$$

$$\begin{aligned} \text{x ii)} \quad & m - n - (-m) - m \\ & = m - n + m - m \\ & = -n \end{aligned}$$

$$\begin{aligned} \text{x iii)} \quad & x + y - (x + y - x) \\ & = x + y - x - y + x \\ & = x \end{aligned}$$

$$\begin{aligned} \text{x iv)} \quad & 25y - (5x + 10y + 6x) \\ & = 25y - 5x - 10y - 6x \\ & = 15y - 11x \end{aligned}$$

$$\begin{aligned} \text{x v)} \quad & 3x + (2x - x + 2) \\ & = 3x + 2x - x + 2 \\ & = 4x + 2 \end{aligned}$$

$$\begin{aligned} \text{x vi)} \quad & a - (2a - 4a + 3a) \\ & = a - 2a + 4a - 3a \\ & = 0 \end{aligned}$$

$$\begin{aligned} \text{x vii)} \quad & 5x^2 - (3x - x^2 - 4) \\ & = 5x^2 - 3x + x^2 + 4 \\ & = 6x^2 - 3x + 4 \end{aligned}$$

$$\begin{aligned} \text{x viii)} \quad & -(y - x) - (x - y) \\ & = -y + x - x + y \\ & = 0 \end{aligned}$$

- 3 i) $x + y - z$, i) x ii) $10x - 15y$ iii) $a + 13b$
 v) $2a - 2b - c$ vi) $b - c$ vii) $x + 2ly$ viii) $5a^2 - 10$
 xiii) $5a^2 - 10a$