

NCERT Maths Solutions by Dev Anoop (Bathinda)

$$\begin{aligned}
 \text{(iii)} \quad & 6x^2 - 3 - 7x \\
 &= 6x^2 - 7x - 3 \\
 &= 6x^2 - 9x + 2x - 3 \\
 &= 3x(2x - 3) + 1(2x - 3) \\
 &= (2x - 3)(3x + 1)
 \end{aligned}$$

For finding zeros

$$2x - 3 = 0, \quad 3x + 1 = 0$$

$$\Rightarrow x = \frac{3}{2}, \quad x = -\frac{1}{3}$$

$$\text{Sum of zeros} = \frac{3}{2} + -\frac{1}{3}$$

$$= \frac{9 - 2}{6}$$

$$= \frac{7}{6}$$

$$= -\left(\frac{-7}{6}\right)$$

$$= -\frac{b}{a} \quad \left[\because \begin{array}{l} b = -7 \\ a = 6 \end{array} \right]$$

$$\text{Product of zeros} = \frac{3}{2} \times -\frac{1}{3}$$

$$= -\frac{3}{6}$$

$$= \frac{c}{a} \quad \left[\because \begin{array}{l} c = -3 \\ a = 6 \end{array} \right]$$