

## NCERT Maths Solutions by Dev Anoop (Bathinda)

$$\begin{aligned}
 10 \text{ (i)} \quad & x^2 - 2x - 8 \\
 & = x^2 - 4x + 2x - 8 \\
 & = x(x-4) + 2(x-4) \\
 & = (x-4)(x+2)
 \end{aligned}$$

For finding zeros

$$x - 4 = 0, \quad x + 2 = 0$$

$$\Rightarrow x = 4, \quad x = -2$$

$$\begin{aligned}
 \text{Sum of zeros} & = 4 + (-2) \\
 & = \frac{2}{1}
 \end{aligned}$$

$$= -\left(\frac{-2}{1}\right)$$

$$= -\frac{b}{a}$$

$$[\because a=1, b=-2]$$

$$\text{Product of zeros} = 4(-2)$$

$$= -\frac{8}{1} = \frac{c}{a} \quad [\because a=1, c=-8]$$