

NCERT Maths Solutions by Dev Anoop (Bathinda)

$$\begin{aligned}
 1 \text{ (ii)} \quad & 4s^2 - 4s + 1 \\
 &= 4s^2 - 2s - 2s + 1 \\
 &= 2s(2s-1) - 1(2s-1) \\
 &= (2s-1)(2s-1)
 \end{aligned}$$

For finding zeros

$$2s-1=0, \quad 2s-1=0$$

$$\Rightarrow s = \frac{1}{2}, \quad s = \frac{1}{2}$$

$$\begin{aligned}
 \text{Sum of zeros} &= \frac{1}{2} + \frac{1}{2} \\
 &= \frac{2}{2} + \frac{2}{2} \\
 &= \frac{4}{2} \\
 &= -\frac{(-4)}{4} \\
 &= -\frac{b}{a} \quad [\because b = -4]
 \end{aligned}$$

$$\begin{aligned}
 \text{Product of zeros} &= \frac{1}{2} \times \frac{1}{2} \\
 &= \frac{1}{4} \\
 &= \frac{c}{a} \quad [\because c = 1]
 \end{aligned}$$