

## Solutions by Dev Anoop (Bathinda)

1. Principal = Rs 6000, rate = 9% pa, time = 2 years

$$\begin{aligned} \text{Amount} &= P \left(1 + \frac{r}{100}\right)^n \\ &= 6000 \left(1 + \frac{9}{100}\right)^2 \\ &= 6000 \times \frac{109}{100} \times \frac{109}{100} \\ &= \text{Rs } 7128.60 \end{aligned}$$

$$\begin{aligned} \text{CI} &= A - P \\ &= 7128.60 - 6000 \\ &= \text{Rs } 1128.60 \end{aligned}$$

2. P = Rs 10000, r = 11% pa, t = 2 years

$$\begin{aligned} \text{Amount} &= P \left(1 + \frac{r}{100}\right)^n \\ &= 10000 \left(1 + \frac{11}{100}\right)^2 \\ &= 10000 \times \frac{111}{100} \times \frac{111}{100} \\ &= \text{Rs } 12321 \end{aligned}$$

$$\begin{aligned} \text{CI} &= A - P \\ &= 12321 - 10000 \\ &= \text{Rs } 2321 \end{aligned}$$

③ P = Rs 31250, t = 3 years, rate = 8% pa

$$\begin{aligned} \text{amount} &= P \left(\frac{100+r}{100}\right)^n \\ &= 31250 \left(\frac{100+8}{100}\right)^3 \\ &= 31250 \times \frac{108}{100} \times \frac{108}{100} \times \frac{108}{100} \\ &= \text{Rs } 39366 \end{aligned}$$

$$\begin{aligned} \text{CI} &= 39366 - 31250 \\ &= \text{Rs } 8116 \end{aligned}$$