



Compound Interest Ex 14.1 Q4

**Answer :**

**Given :**

$$P = \text{Rs } 1,000$$

$$R = 8\% \text{ p. a.}$$

$$n = 1.5 \text{ years}$$

**We know that :**

$$\begin{aligned} A &= P \left( 1 + \frac{R}{200} \right)^{2n} \\ &= 1,000 \left( 1 + \frac{8}{200} \right)^3 \\ &= 1,000(1.04)^3 \\ &= \text{Rs } 1,124.86 \end{aligned}$$

**Now,**

$$\begin{aligned} CI &= A - P \\ &= \text{Rs } 1,124.86 - \text{Rs } 1,000 \\ &= \text{Rs } 124.86 \end{aligned}$$

Compound Interest Ex 14.1 Q5

**Answer :**

**Given :**

$$P = \text{Rs } 16,000$$

$$R = 20\% \text{ p.a.}$$

$$n = 1 \text{ year}$$

**We know that :**

$$\begin{aligned} A &= P \left( 1 + \frac{R}{400} \right)^{4n} \\ &= 16,000 \left( 1 + \frac{20}{400} \right)^4 \\ &= 16,000 (1.05)^4 \\ &= \text{Rs } 19,448.1 \end{aligned}$$

**Now,**

$$\begin{aligned} CI &= A - P \\ &= \text{Rs } 19,448.1 - \text{Rs } 16,000 \\ &= \text{Rs } 3,448.1 \end{aligned}$$

\*\*\*\*\* END \*\*\*\*\*