

Compound Interest Ex 14.3 Q1

Answer:

Let the sum be Rs x.

We know that:

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$$CI = A - P$$

$$= P \left(1 + \frac{R}{100} \right)^{n} - P$$

$$= P \left[\left(1 + \frac{R}{100} \right)^{n} - 1 \right]$$

$$164 = x \left[\left(1 + \frac{5}{100} \right)^{2} - 1 \right]$$

$$164 = x \left[(1.05)^{2} - 1 \right]$$

$$x = \frac{164}{0.1025}$$

$$= 1,600$$

Thus, the required sum is Rs 1,600.

Compound Interest Ex 14.3 Q2

Answer:

Let the sum be Rs x.

We know that:

$$CI = A - P$$

$$= P \left(1 + \frac{R}{100} \right)^{n} - P$$

$$= P \left[\left(1 + \frac{R}{100} \right)^{n} - 1 \right]$$

$$210 = x \left[\left(1 + \frac{10}{100} \right)^{2} - 1 \right]$$

$$210 = x \left[(1.10)^{2} - 1 \right]$$

$$x = \frac{210}{0.21}$$

$$= 1,000$$

Thus, the required sum is Rs 1,000.

Compound Interest Ex 14.3 Q3

Answer:

Let the sum be Rs x. Then,

$$A = P\left(1 + \frac{R}{100}\right)^{n}$$

$$= P\left[\left(1 + \frac{R}{100}\right)^{n}\right]$$

$$756.25 = x\left[\left(1 + \frac{10}{100}\right)^{2}\right]$$

$$756.25 = x\left[\left(1.10\right)^{2}\right]$$

$$x = \frac{756.25}{1.21}$$

$$= 625$$

Thus, the required sum is Rs 625.

********* END *******