Exercise 12A

Q12

Answer :

$P = \text{Rs } 6000,\ R = 12\%,\ T = 3 \text{ years } 8 \text{ months} = 3\frac{8}{12} = \frac{44}{12} \text{ years}$

$\text{S.I.} = \frac{P \times R \times T}{100} = \frac{6000 \times 12 \times 44}{100 \times 12} = \text{Rs } 2640$

$A = P + \text{S.I.}$

$= 6000 + 2640$

$= \text{Rs } 8640$

Q13

Answer :

$P = \text{Rs. } 12600 \qquad R = 15\% \qquad T = 3 \text{ years}$

$\text{S.I.} = \frac{P \times R \times T}{100} = \frac{12600 \times 15 \times 3}{100}$

$= \text{Rs. } 5670$

$A = \text{Rs. } 12600 + \text{Rs. } 5670 = \text{Rs. } 18270$

Hari had to pay Rs. 18270 to the money lender, but he paid Rs. 7070 and a goat.

$\therefore$ Cost of the goat $= \text{Rs. } 18270 - \text{Rs. } 7070$

$= \text{Rs. } 11200$

Q14

Answer :

Let the sum be Rs. P.

S.I. = Rs. 829.50, T = 3 years, R = 10%

Now, $P = \frac{S.I \times 100}{R \times T}$

$= \frac{829.50 \times 100}{10 \times 3}$

$= \frac{8295}{3}$

$= 2765$

Hence, the sum is Rs. 2765.

Q15

Answer :

Let the required sum be Rs. x.

A = Rs. 3920, $R = 7\frac{1}{2}\%$, T = 3 years

Now,

Now, $S.I. = \frac{P \times R \times T}{100} = \frac{x \times 15 \times 3}{2 \times 100} = \frac{9x}{40}$

$A = P + S.I.$

$= x + \frac{9x}{40} = \frac{40x + 9x}{40} = \frac{49x}{40}$

But the amount is Rs. 3920.

$=> \frac{49x}{40} = 3920$

$=> x = \frac{3920 \times 40}{49} = \frac{156800}{49} = 3200$

Hence, the required sum is Rs. 3200.

Q16

Answer :

Given: R=11%, T=2 years 3 months $= 2+\frac{3}{12} = \frac{27}{12}$ years

Let the required sum be Rs. x.

$$\text{S.I.} = \frac{P \times R \times T}{100} = \frac{x \times 11 \times \cancel{2\ 7}^{\ 9}}{100 \times \cancel{1\ 2}_{\ 4}} = \frac{99x}{400}$$

$$A = P + S.I.$$

$$= x + \frac{99x}{400} = \frac{400x + 99x}{400} = \frac{499x}{400}$$

But the amount is Rs. 4491.

$$\Rightarrow \frac{499x}{400} = 4491$$

$$\Rightarrow x = \frac{4491 \times 400}{499} = \frac{1796400}{499} = 3600$$

Hence, the required sum is Rs. 3600.

$$\therefore \text{S.I.} = \frac{P \times R \times T}{100} = \frac{3600 \times 11 \times 3}{100} = \text{Rs. } 1188$$

$$\therefore \text{Amount} = P + S.I. = 3600 + 1188$$

$$= \text{Rs. } 4788$$

Q17

Answer :

Let the required sum be Rs. x.

$$\text{S.I.} = \frac{P \times R \times T}{100} = \frac{x \times 8 \times 2}{100} = \frac{16x}{100}$$

$$A = P + S.I.$$

$$= x + \frac{16x}{100} = \frac{100x + 16x}{100} = \frac{116x}{100}$$

But the amount is Rs. 12122.

$$\Rightarrow \frac{116x}{100} = 12122$$

$$\Rightarrow x = \frac{12122 \times 100}{116} = 10450$$

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