

Let sum = x

We know,

$$\text{S.I.} = \frac{\text{PRT}}{100}$$

$$\text{SI} = x$$

$$\begin{aligned}\text{Rate} &= \frac{(100 \times x)}{(x \times 6)} \\ &= \frac{50}{3}\% \end{aligned}$$

Now sum = x, S.I = 3x

$$\text{Rate} = \frac{50}{3}\%$$

Time

$$\begin{aligned} &= \frac{(100 \times 3x)}{x \times \frac{50}{3}} \\ &= 18 \text{ years.} \end{aligned}$$