

Examples

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Ex 17 Mr. A lends 40% of sum at 15% p.a., 30% of rest sum at 10% p.a. and the rest at 18% p.a. rate of interest. What would be the rate of interest if the interest is calculated on the whole sum?

→ Let principal be = 100 Rs.

Resultant interest

$$= \boxed{40} \times 15\% + \boxed{30} \times 10\% + \boxed{30} \times 18\%$$

$$= 6 + 3 + 5.4 = 14.4 \text{ \% per annum}$$

Ex 18 A sum invested a sum of money at a certain rate of S.T for a period of 4 years. Had he invested the same sum for a period of 6 years the total interest earned by him would have 50% more than earlier interest amount. What was the rate of interest per annum?

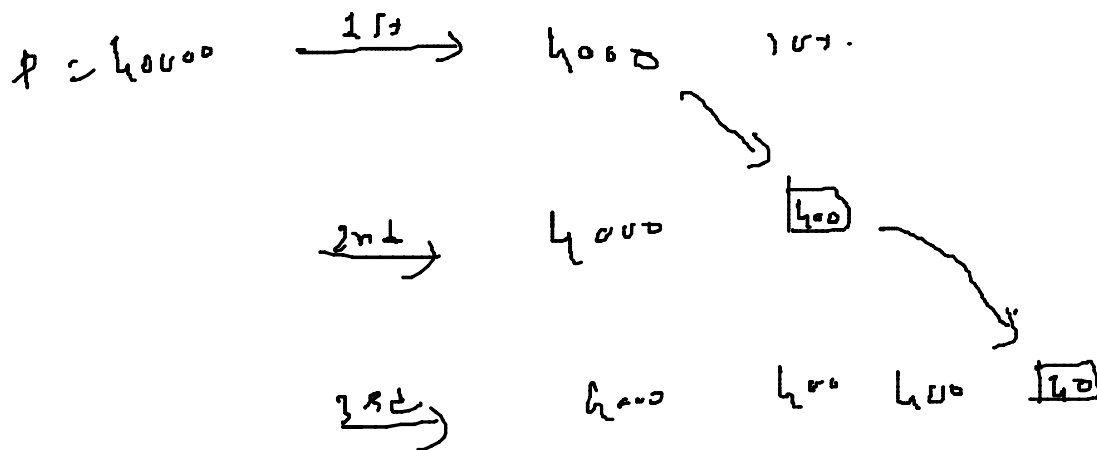
$$\rightarrow \frac{P \times R \times \boxed{6}}{100} = \frac{P \times R \times \boxed{4}}{100} \times \frac{150}{100}$$

no output,

Q2 The simple interest accrued on an amount of Rs. 40,000 at the end of 3 years is Rs. 12,000

What would be C.I. accrued on the same amount at the same rate of in the same period?

$$R = \frac{S.I. \times 100}{P \times N} = \frac{12000 \times 100}{40000 \times 3} = 10\%$$



$$C.I. = Rs. 13,240$$