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* ——— Simple - Interest ——— *

Q1- A Simple interest the contains sum of money is Rs 3500 less than principal. find the principal if the rate of Interest $12\frac{1}{2}\%$ & time is 3 years.

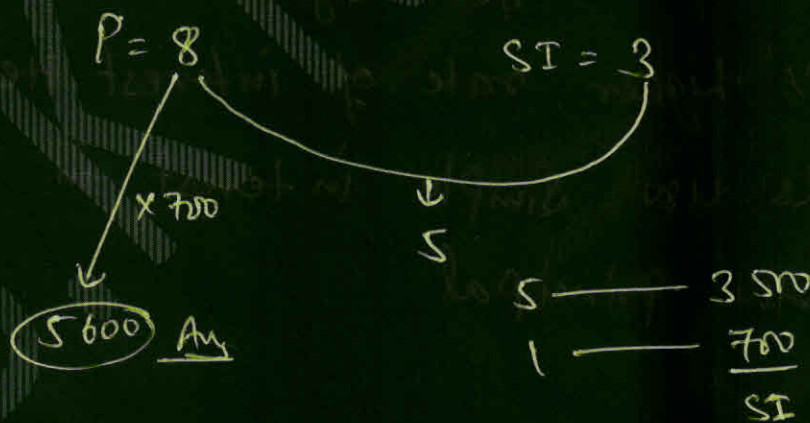
$$12\frac{1}{2}\% = \frac{\text{SI}}{P \times T}$$

becz SI always same annually.

$$P = 8$$

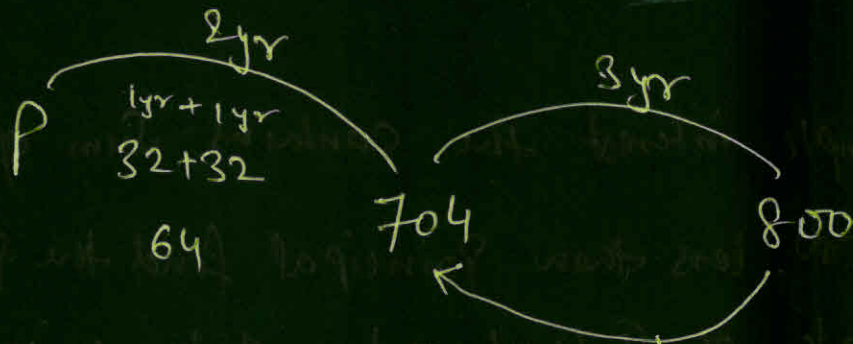
$$SI = 1 \times 3 = 3$$

$$\begin{array}{l} 1\text{yr} \quad 2\text{yr} \quad 3\text{yr} \\ 1 + 1 + 1 = 3 \end{array}$$



Q2 A certain sum of money Amount of Rs 704 in 2 years and 800 in 5 years. find principal & rate of Interest.

Ans:



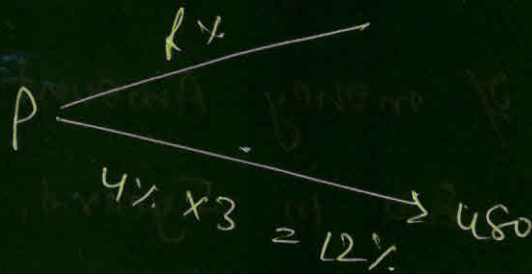
$$P + 64 = 704$$

$$P = \underline{640}$$

$$\frac{32}{640} = \frac{1}{20} = \textcircled{5\%} \text{ Ans}$$

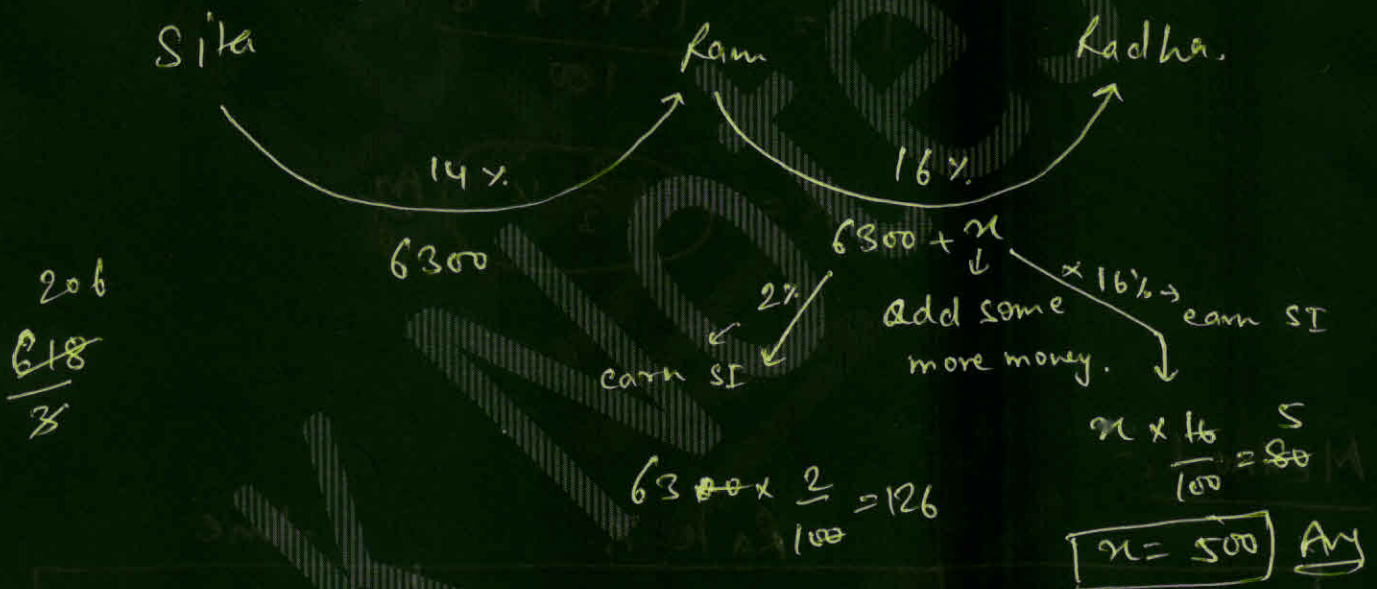
Q5

A certain sum of money is invested at a certain rate of SI for 3 years. Had it been invested 4% higher rate of interest he would earn Rs 480 simple interest in 3 years. find the principal.

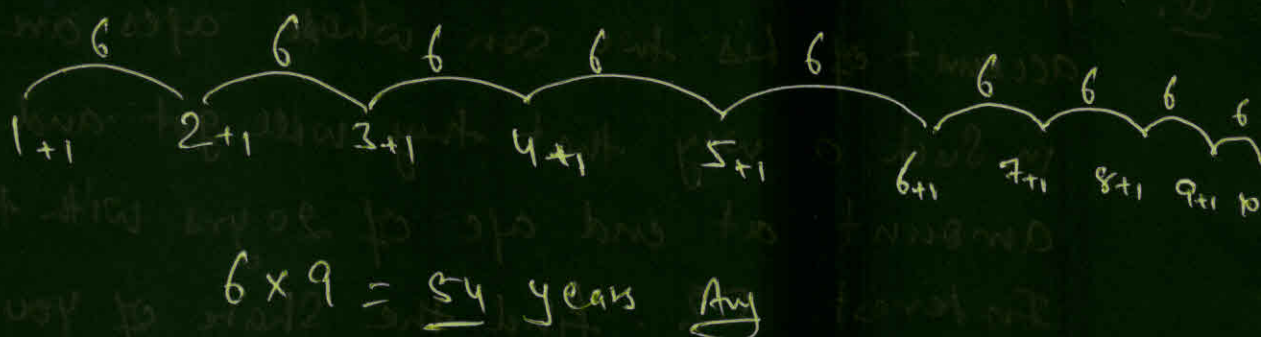


$$P \times \frac{12}{100} = 480$$

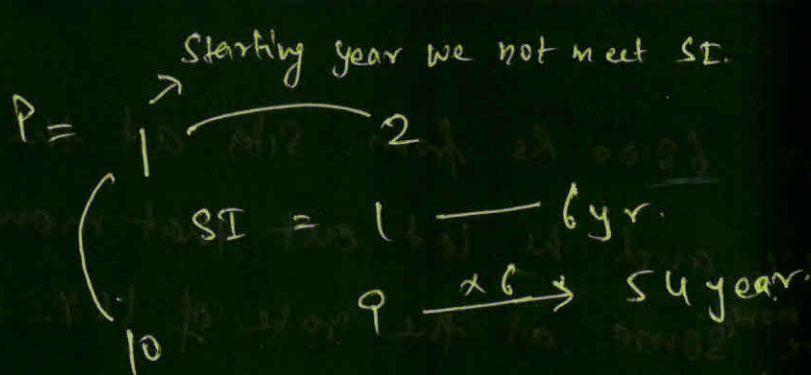
Q:- Ram borrow 6300 Rs from Sita at the rate Simple Interest 14% and he let out that money by adding some more some at the rate of 16% to Radha the whole process Ram earn Rs 618 in 3 year find the money added by Ram.



Q1- A certain sum of money become double itself in 6 year in how many years it will becomes 10 times of itself also find Rate of Interest.



or



$$SI = \frac{P \times R \times T}{100}$$

$$1 = \frac{1 \times R \times 8}{100}$$

$$R = 16 \frac{2}{3} \% \text{ p.a.}$$

Method:-

	Rate %	Time
Double	$\frac{1}{T} \times 100$	$\frac{1}{R} \times 100$
Triple	$\frac{2}{T} \times 100$	$\frac{2}{R} \times 100$
4-times	$\frac{3}{T} \times 100$	$\frac{3}{R} \times 100$

Q:- A man wants to invest Rs 81000 in the bank account of his two son whose ages are 12 & 14 yrs in such a way that they will get and equal amount at end age of 20 yrs with the rate of Interest 5%. Find the share of younger son.

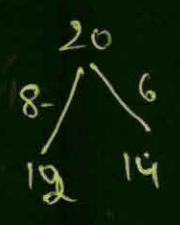
20-12=8, 20-14=6

A

B

40% = $\frac{40}{100} \times 140$

30% = $\frac{30}{100} \times 130$



8x5=40%
6x5=30%

A x 140 = B x 130

$\frac{A}{B} = \frac{13}{14} \times 27 = 27 \times \frac{13}{14}$
39000
81000
81000
-27
54000

Q1:- The rate of Interest the 12000 for first 3 year is 6%. for next 4 years is 7% & for next 4 year is 7.5%, find the total Simple Interest earn by him.

6% x 3 = 18%

7% x 4 = 28%

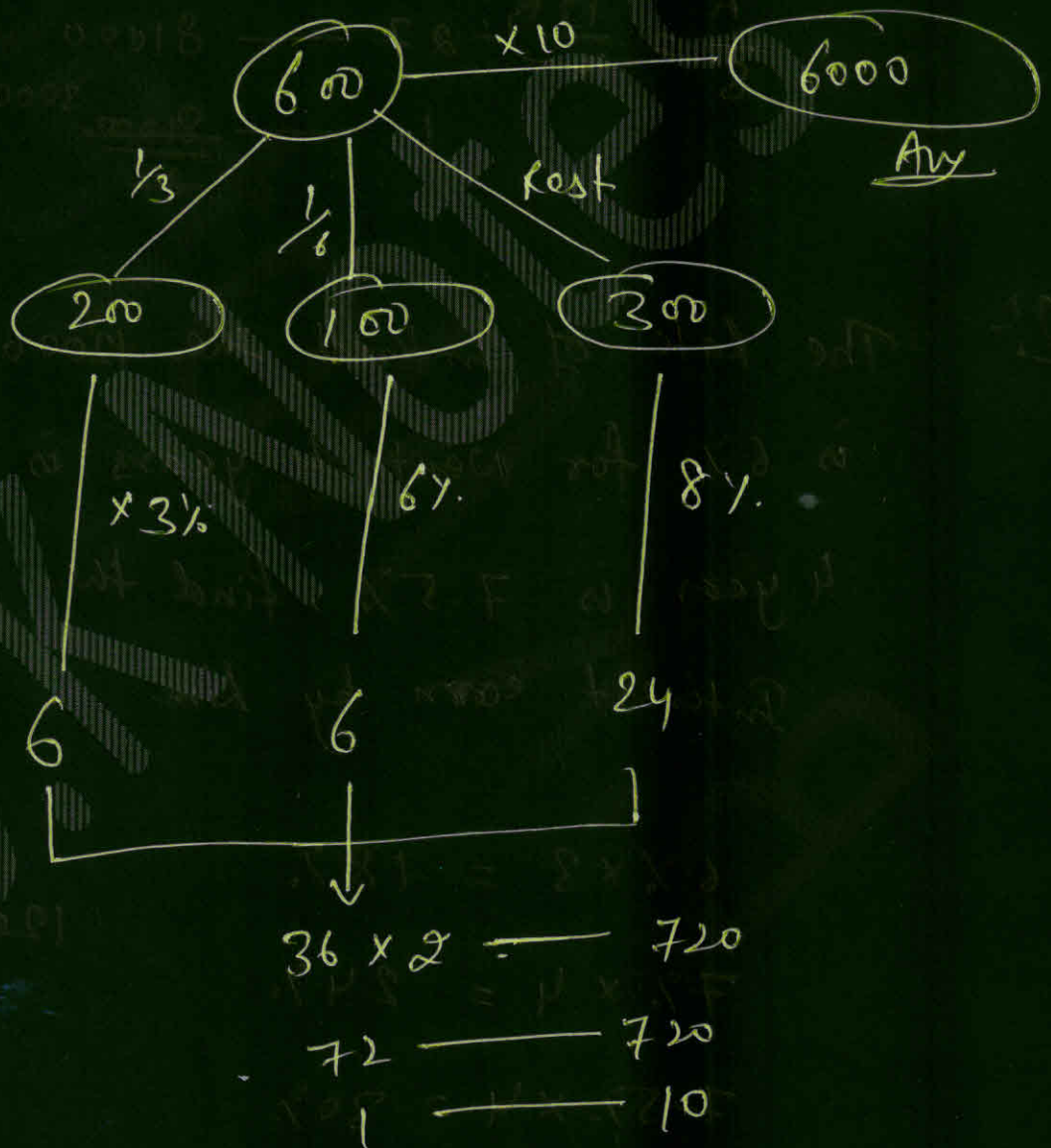
7.5% x 4 = 30%

76%

12000 x $\frac{76}{100} =$

9120 Ans

Q:- out of certain sum $\frac{1}{3}$ invested at 3%. $\frac{1}{6}$ invested at 6%. And rest of Part invested at 8%. if the Simple Interest for 2 years from all these parts are Rupees 720 then find the Principal.



Q:- What Annual instolement will discharge a debt of Rs 770 in 5 equal instolement and the Rate of 5% Per annum on Simple Interest.

$$\text{Instolement} = \frac{\text{Debt}}{\text{No. of Inst} + (\text{time} \times R\%)}$$

$$= \frac{770}{5 + (\cancel{4+3+2+1}) \times \frac{8}{100}} = \frac{770}{5 + \frac{11}{2}} = \frac{770}{\frac{20+11}{2}} = \frac{770 \times 2}{31} = 140 \text{ Ans}$$

Q1. what annual Instolement will discharge a debt Rs 6450 in unequal instolement at the rate of 5%.

$$\text{Instolement} = \frac{6450}{4 + (\frac{3+2+1}{36}) \times \frac{5}{100}} = \frac{6450}{4 + \frac{3}{10}} = \frac{6450 \times 10}{43} = 1500 \text{ Ans}$$

Q1. A man deposit Rs 2000 in his Bank account at the end of each yr and Bank Promise to him Simple Interest by 10% rate of interest find what amount he will at end of 3 years.

$$\text{Ist} - 2000 \xrightarrow[10\% + 10\%]{2\text{nd} + 3\text{rd yr}} 400$$

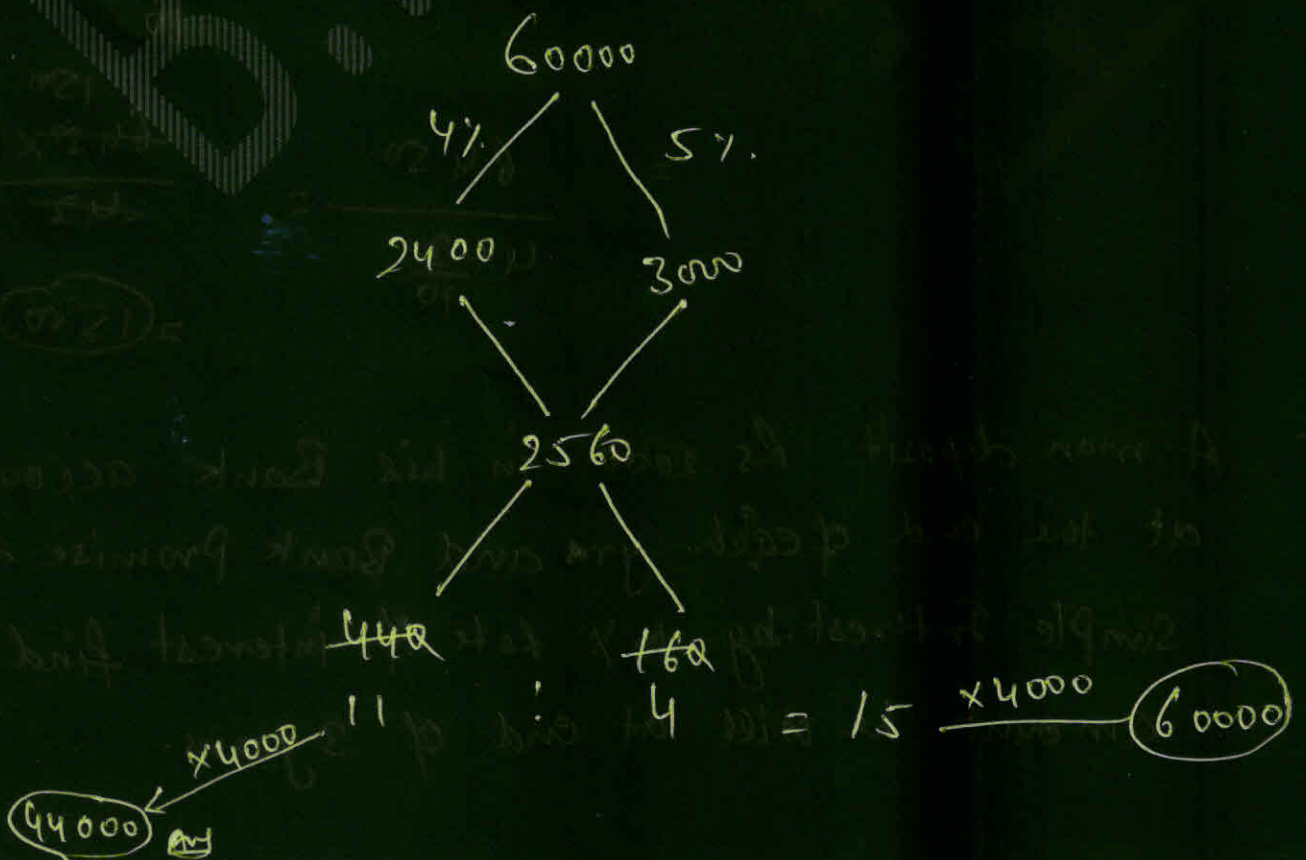
$$\text{IInd} - 2000 \xrightarrow[10\%]{3\text{rd}} 200$$

$$\text{IIIrd} - 2000 \xrightarrow{0} 0$$

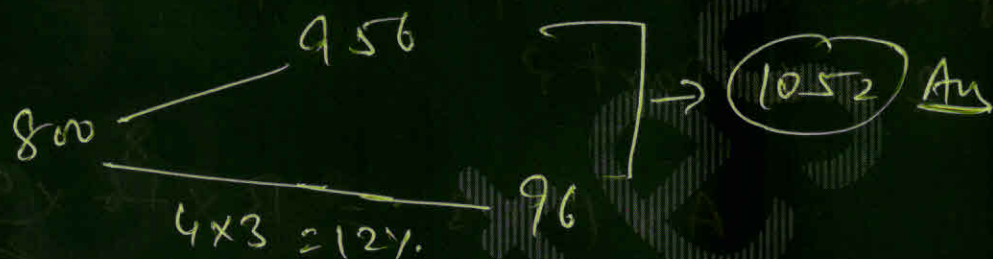
$$6000 \qquad \qquad \qquad 600$$

↓
6000 Ans

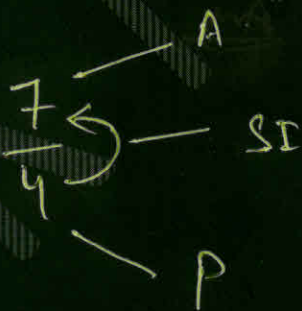
Q: A man lend Rs 60000 in part at 5% and 4% on simple interest. if the total annual simple is Rs 2560 then find the land part of money at 4%.



Q:- Rupees 8000 becomes 956 in 3 years at the certain rate of simple interest if the rate of interest increase by 4%. then what amount rupees 800 becomes after 3 years.



Q:- At what rate of simple interest will sum become $\frac{7}{4}$ itself in 4 yrs.

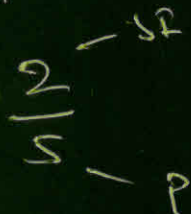


$$3 = \frac{P \times R \times 4}{\frac{100}{25}}$$

$$\frac{75}{4} = R$$

$$R = \left(18 \frac{3}{4}\right) \% \text{ Ans}$$

Q:- in what time will the Simple Interest be $\frac{2}{5}$ of the Principal at 8% rate of interest



$$\frac{100\%}{8\%} = 5 \text{ year Ans}$$

Q1 - RS 12000 is divided into two part such that the simple interest on first part for 3yr and 12% rate of Interest may be equal two simple interest in second part for $4\frac{1}{2}$ yr at the rate of 16%. find the rate of 1st & 2nd part?

$$A \times 12 \times 3 = B \times \frac{16}{100} \times \frac{9}{2}$$

$$36 = 72$$

$$1 : 2$$

$$\frac{A}{B} = \frac{2}{1} \quad \underline{\text{Ans}}$$