

5-1-2014

SIMPLE INTEREST (I)

$$I = \frac{PTR}{100}$$

$$\text{Amount (A)} = P + I$$

P.9 No. 86

1. Given $P = 800$ $T = 3$ years, $A = 956$, $R = ?$

$$A = P + I$$

$$I = A - P = 156$$

$$I = \frac{PTR}{100}$$

$$156 = \frac{800 \times 3 \times R}{100}$$

$$R = 6.5\%$$

$$R = 6.5 + 4 = 10.5\%$$

$$I = \frac{800 \times 3 \times 10.5}{100}$$

$$= 252$$

$$A = P + I = 800 + 252 = 1052$$

2. Given $I = 600$ $P = ?$ $R = ?$

$$T = 10 \text{ yrs} \left\{ \begin{array}{l} 5 \text{ yrs} \rightarrow P \\ 5 \text{ yrs} \rightarrow 3P \end{array} \right\} \quad I = \frac{P \times 5 \times \frac{6000}{P}}{100} + \frac{3P \times 5 \times \frac{6000}{P}}{100}$$

$$I = \frac{PTR}{100}$$

$$= 300 + 900$$

$$I = 1200$$

$$600 = \frac{P \times 10 \times R}{100}$$

$$R = \frac{6000}{P}$$

4. Given $P = 100$ $T = \frac{1}{2}$ year $R = 10\%$

$$I = \frac{100 \times \frac{1}{2} \times 10}{100} = 5/-$$

$$P = 100 + 5 = 105$$

$$I = \frac{105 \times \frac{1}{2} \times 10}{100} = 5.25 \text{ RS.}$$

$$10.25 \times 100 = 1025 \text{ Rs.}$$