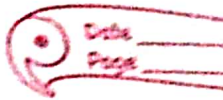


## Home work



Q1) Time = 2  
Rate = 10%  
C.I = 525  
Sum = X

$$X \left[ \left( 1 + \frac{10}{100} \right)^2 - 1 \right] = 525$$

$$\Rightarrow X \left[ \left( \frac{11}{10} \right)^2 \right] = 525$$

$$\Rightarrow X \left[ \frac{121 - 100}{100} \right] = 525$$

$$\Rightarrow X = \frac{525 \times 100}{21} = 2500$$

Time = 4

Rate = 5%

Principle = ₹2500

$$S.I = \frac{2500 \times 5 \times 4}{100} = 500$$

2) i) Principal = 24000  
Time = 2 yrs  
Rate = 10%

$$C.I. = P \times (1+r)^n - P$$

$$\Rightarrow P \{ (1+r)^n - 1 \}$$

$$\Rightarrow 4000 (1 + .10)^2 - 1$$

$$\Rightarrow 4000 (1.21 - 1)$$

$$\Rightarrow 840$$

~~Q~~  $T = 3$

ii) Rate = 8%

~~P~~  $C.I. = 420$

$$P = \frac{P \times 8 \times 3}{100} = 420$$

$$\Rightarrow P \times 8 \times 3 = 420 \times 100 = 42000$$

$$\Rightarrow P \times 8 = 42000 \div 3 = 14000$$

$$\Rightarrow P = 14000 \div 8 = 21750$$

3) Doubt

4)  $P = 15000$

$T = 2 \text{ yrs}$

Amount = 96

$$\text{rate} = \left[ \left( \frac{A}{P} \right)^{1/T} - 1 \right] \% \text{ p.a.}$$

$$\Rightarrow \left[ \left( \frac{96}{15000} \right)^{1/2} - 1 \right]$$

$$\Rightarrow 0.008 = 0.8\%$$