\[ P = \frac{(I \times 100)}{[(R1 \times T1) + (R2 \times T2) + (R3 \times (T3 - T2 - T1))] } \]

Ex: On a sum of money the rate of interest is 5% Per Annum for the first 3 years, 6% Per Annum for the next 4 years, and 8% Per Annum for the next years beyond the first 7 Years. If the interest obtained in 12 Years is Rs. 3,950, Find the Sum?

Sol: 5% X 3 + 6% X 4 + 8% X 5 = 15% + 24% + 40% = 79%
    => (79/100) P = 3950
    P = \frac{(39500/79)}{} = 5000

Trick-3: If sum becomes $S1$ in $T$ years and $S2$ in $T+1$ years, Rate of interest is

\[ R = \frac{[(S2 - S1) \times 100]}{[S1 - (S2 - S1) \times T]} \]

Here, $I = S2 - S1$, $P = S1 - (S2 - S1)$

Ex: if sum becomes 1200 in 2 years and 1400 in 3 years, so the Rate of interest is?

a. 10  b. 15  c. 20  d. 12.5

Sol: \[ R = \frac{[(1400 - 1200) \times 100]}{(1000 \times 2)} \]
    \[ R = 10\% \]

Trick-4: If $R1$ is fallen to $R2$. then, income dimensioned by $D$. then, principal becomes

\[ = \frac{(D \times 100)}{(R1 - R2)} \]

Ex: if Rate of interest fallen from 7% to 5%. Due to fall of $R$, income dimensioned by 50. the principal is?

a. 2500  b. 5000  c. 1000  d. 4000

Sol: \[ = \frac{(50 \times 100)}{(7-5)} = 2500 \]

Trick-5: If sum becomes $S1$ in $T1$ years and $S2$ in $T2$ years, then, Rate of interest is

\[ = \frac{[(S2 - S1) \times 100]}{[(T2 - T1) \times S1 - T1 \times (S2 - S1)] \times T1}] \]

Trick-6: $P$ is given in two parts and interest is same. part-I is given for $R1$ for $T1$ years, part-II is given for $R2$ for $T2$ years, the part-I amount is

\[ = \frac{(P \times T2 \times R2)}{[(T1 \times R1) + (T2 \times R2)]} \]

Ex: 10000 is given in two parts and interest is same. part-I is given for 2% Rate of interest for 7 years and part-II is given for 7% Rate of interest for 3 years. then, part-I principal is?