Examples of S.I.

Example 1:Rishav takes a loan of Rs 10000 from a bank for a period of 1 year. The rate of interest is 10% per annum. Find the interest and the amount he has to the pay at the end of a year.

Solution: Here, the loan sum = P = Rs 10000

Rate of interest per year = R = 10%

Time for which it is borrowed = T = 1 year

Thus, simple interest for a year, SI = (P × R ×T) / 100 = (10000 × 10 ×1) / 100 = Rs 1000

Amount that Rishav has to pay to the bank at the end of the year = Principal + Interest = 10000 + 1000 = Rs 11,000

Example 2:Namita borrowed Rs 50,000 for 3 years at the rate of 3.5% per annum. Find the interest accumulated at the end of 3 years.

Solution: P = Rs 50,000

R = 3.5%

T = 3 years

 SI = (P × R ×T) / 100 = (50,000× 3.5 ×3) / 100 = Rs 5250

Example 3:Mohit pays Rs 9000 as an amount on the sum of Rs 7000 that he had borrowed for 2 years. Find the rate of interest.

Solution: A = Rs 9000

P = Rs 7000

SI = A − P = 9000 − 7000 = Rs 2000

T = 2 years

R = ?

SI = (P × R ×T) / 100

R = (SI × 100) /(P× T)

R = (2000 × 100 /7000 × 2) =14.29 %

Thus, R = 14.29%