# Simple Interest

## Understanding: Simple Interest

- Simple Interest (S.I.) is the money paid or earned on a principal amount for a fixed time at a fixed rate.
- It is used in banks, loans, savings, and borrowing situations.

## Important Terms

- **Principal (P):** The original amount of money lent or borrowed
- **Rate (R):** The interest rate per year in percentage
- **Time (T):** The time for which the money is borrowed or lent (in years)
- **Simple Interest (S.I.):** Extra money paid or earned

## Formula

- S.I. $= \dfrac{P \times R \times T}{100}$

## Examples with Solutions

### Example

Find the S.I. on ₹1000 at 5% for 2 years

S.I. $= \dfrac{1000 \times 5 \times 2}{100} = 100$

Simple Interest $=$ ₹100

### Example

Find the S.I. on ₹1500 at 4% for 3 years

S.I. $= \dfrac{1500 \times 4 \times 3}{100} = 180$

Simple Interest $=$ ₹180

### Example

P = ₹2000, R = 6%, T = 1 year

S.I. $= \dfrac{2000 \times 6 \times 1}{100} = 120$

Simple Interest $=$ ₹120

**Example**

A person borrows ₹500 for 2 years at 10%

S.I. = $\dfrac{500 \times 10 \times 2}{100}$ = 100

Simple Interest = ₹100

**Example**

Find the time if P = ₹600, R = 5%, S.I. = ₹60

Use formula: T = $\dfrac{S.I. \times 100}{P \times R}$ = $\dfrac{60 \times 100}{600 \times 5}$ = $\dfrac{6000}{3000}$ = 2

Time = 2 years

## Summary Points

- Simple Interest = $\dfrac{P \times R \times T}{100}$

- Principal is the starting amount.

- Rate is always per year unless mentioned.

- Time should be in years.

- Used in banking, loans, deposits, and savings.