

1-A-1 Simple Interest

Simple Interest is just linear growth in the amount of money. The simple interest rate is the rate of growth over each period.

A - amount at the beginning, or principal

S - amount at the end, or final amount

i - interest rate per period expressed as a decimal (%/100)

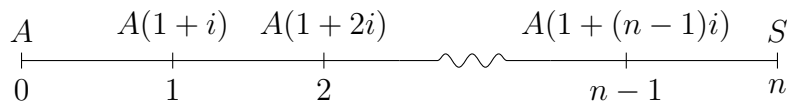
n - number of periods

Then we have

$$\begin{aligned}\text{Amount of Interest} &= I \\ &= A \cdot i \cdot n\end{aligned}$$

and

$$\begin{aligned}S &= A + I \\ &= A(1 + in)\end{aligned}$$



Read this way \Rightarrow

Notes:

- i is a percentage of the beginning amount, but it is credited at the end of each period.
- Interest rates are annual and the period is a year unless otherwise stated