## SIMPLE INTEREST

## COMPOUND INTEREST

| Payment <br> Frequency (Term in years) | Paid periodically: Annually ( $\mathrm{t}=1$ ) Semi-Annually ( $\mathrm{t}=2$ ) Quarterly ( $\mathrm{t}=1 / 4$ ) Monthly ( $\mathrm{t}=1 / 12$ ) Daily ( $t=1 / 365$ ) | One time - paid at the end of the term |
| :---: | :---: | :---: |
| Principal (Aka Capital) | > Remains fixed over term | Grows period over period earns interest on interest |
| Calculation | Simple, quick calculation $\\|=P \mathbf{x} \mathbf{x} T$ | Broader, longer calculation Powerful way to get money to grow in value $\begin{gathered} \\|(\text { year } 1)=P \mathbf{x R} \mathbf{x} T \\ \\|(\mathrm{yr} .2)=[\mathrm{P}+\\|(\mathrm{yr} .1)] \mathbf{x R x T} \\ \\|(\mathrm{yr} .3)=[\mathrm{P}+\\|(\mathrm{yr} .2)] \mathbf{x} \mathrm{R} \mathrm{x} T \end{gathered}$ (and so forth throughout the term) |

$$
\begin{aligned}
& \mathrm{I}= \text { INTEREST money earned in dollars } \\
& \mathrm{P}= \text { the PRINCIPAL starting amount of } \\
& \text { money (loan or investment value) } \\
& \mathrm{R}= \text { the interest RATE for the term } \\
& \mathrm{T}= \text { the TERM (or "time period") the money } \\
& \text { is invested or borrowed for }
\end{aligned}
$$



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