

## Engineering Economy Formulas

### Simple Interest Calculations

Name	Formula	Cash Flow Diagram
interest earned over n periods	$I = Pni$	
future value related to present value	$F = P(1 + ni)$	
present value related to future value	$P = \frac{F}{1 + ni}$	

### Compound Interest Calculations

Name	Formula	Cash Flow Diagram
future value related to present value	$F = P(1 + i)^n$	
present value related to future value	$P = F(1 + i)^{-n}$	
future value accumulated due to n periodic deposits of amount A	$F = A \left[ \frac{(1 + i)^n - 1}{i} \right]$	
present value related to n future deposits of A	$P = A \left[ \frac{(1 + i)^n - 1}{i(1 + i)^n} \right]$	