

Discounted Cash Flow Analysis Formulas

- $(F/P, i, N) = (1 + i)^N$
- $(P/F, i, N) = (1 + i)^{-N}$
- $(A/F, i, N) = \frac{i}{(1+i)^N - 1}$
- $(F/A, i, N) = \frac{[(1+i)^N - 1]}{i}$
- $(A/P, i, N) = \frac{i(1+i)^N}{[(1+i)^N - 1]}$
- $(P/A, i, N) = \frac{(1+i)^N - 1}{[i(1+i)^N]}$
- Capitalized Value = $A \times (P/A, i, \infty) = A/i$
- $(A/G, i, N) = \frac{1}{i} - \frac{N}{(1+i)^N - 1}$
- $(P/A, g, i, N) = \frac{(P/A, i^0, N)}{1+g}$
 - $i^0 = \frac{1+i}{1+g} - 1$

Built-in formulas in Excel

- $F \times (P/F, i, N) = PV(i, N, -F)$
- $P \times (F/P, i, N) = FV(i, N, -P)$
- $F \times (A/F, i, N) = PMT(i, N, -F)$
- $A \times (F/A, i, N) = FV(i, N, -A)$
- $P \times (A/P, i, N) = PMT(i, N, -P)$
- $A \times (P/A, i, N) = PV(i, N, -A)$
- No built-in formula for $(A/G, i, N)$, sorry!
- You can build your own $(P/A, g, i, N)$ using Excel's PMT function, since $A \times (P/A, g, i, N) = A \times (P/A, i^0, N)/(1+g)$:
- $A \times (P/A, g, i, N) = PV((1+i)/(1+g) - 1, N, -A)/(1+g)$