

Relations for Discrete Cash Flows with End-of-Period Compounding

Type	Find/Given	Factor Notation and Formula	Relation	Sample Cash Flow Diagram
Single Amount	Compound amount	F/P	$F = P(F/P, i, n)$	
	Present worth	$(P/F, i, n) = \frac{1}{(1+i)^n}$	$P = F(P/F, i, n)$	
Uniform Series	Present worth	P/A	$P = A(P/A, i, n)$	
	Capital recovery	A/P	$A = P(A/P, i, n)$	
Series	Compound amount	F/A	$F = A(F/A, i, n)$	
	Sinking fund	A/F	$A = F(A/F, i, n)$	
Arithmetic Gradient	Present worth	P_c/G	$P_c = G(P/G, i, n)$	
	Uniform series	A_c/G	$A_c = G(A/G, i, n)$	
Geometric	Present worth	P_s/A_1 and g	$P_s = \begin{cases} A_1 \left[1 - \left(\frac{1+g}{1+i} \right)^n \right] / (i-g) & g \neq i \\ A_1 \frac{1}{i} & g = i \end{cases}$	