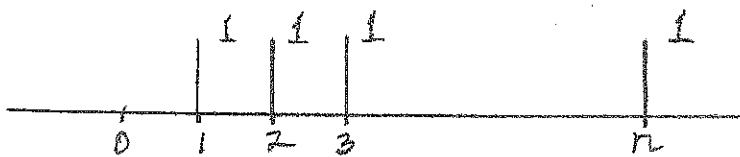


Chapter 5 Formulas



Generic Loan

Loan Amount: $A_{n|i}$

i = effective interest rate per payment period for loan

Amortization Method:

$B_t = A_{n-t|i}$ outstanding loan balance right after t^{th} payment

t^{th} payment:

$$I_t = 1 - v^{n+1-t} \quad \text{interest}$$

$$P_t = v^{n+1-t} \quad \text{principal}$$

Sinking Fund $L =$ loan amount

$$L \left(i + \frac{1}{s_{n|j}} \right) = \text{payment amount}$$

with j being sinking fund eff. interest rate per payment period

and i eff. interest rate charged for the loan per payment period