(7) Symbols. The symbols used to express the terms of a transaction in the equation set forth in paragraph (b)(8) of this section are defined as follows:

\[ A_k = \text{The amount of the } k\text{th advance.} \]

\[ q_k = \text{The number of full unit-periods from the beginning of the term of the transaction to the } k\text{th advance.} \]

\[ e_k = \text{The fraction of a unit-period in the time interval from the beginning of the term of the transaction to the } k\text{th advance.} \]

\[ m = \text{The number of advances.} \]

\[ P_j = \text{The amount of the } j\text{th payment.} \]

\[ t_j = \text{The number of full unit-periods from the beginning of the term of the transaction to the } j\text{th payment.} \]

\[ f_j = \text{The fraction of a unit-period in the time interval from the beginning of the term of the transaction to the } j\text{th payment.} \]

\[ n = \text{The number of payments.} \]

\[ i = \text{The percentage rate of finance charge per unit-period, expressed as a decimal equivalent.} \]

Symbols used in the examples shown in this appendix are defined as follows:

\[ a_{x} = \text{The present value of 1 per unit-period for } x\text{ unit-periods, first payment due immediately.} \]

\[ a_{x} = 1 + \frac{1}{(1+i)} + \frac{1}{(1+i)^2} + \ldots + \frac{1}{(1+i)^{x-1}} \]

\[ w = \text{The number of unit-periods per year.} \]

\[ I = \text{wi} \times 100 = \text{The nominal annual percentage rate.} \]