

Example (ii): Skipped payment loan plus single payments

A loan of \$7350 on 3-3-78 is to be repaid by 3 monthly payments of \$1000 each beginning 9-15-78, plus a single payment of \$2000 on 3-15-79, plus 3 more monthly payments of \$750 each beginning 9-15-79, plus a final payment of \$1000 on 2-1-80.

Unit-period = 1 month. Unit-periods per year (w) = 12.

First series of payments begins 6 unit-periods plus 12 days after 3-3-78. (t = 6; f = 12/30)

1 1

Second series of payments (single payment) occurs 12 unit-periods plus 12 days after 3-3-78. (t = 12; f = 12/30)

2 2

Third series of payments begins 18 unit-periods plus 12 days after 3-3-78. (t = 18; f = 12/30)

3 3

Final payment occurs 22 unit-periods plus 29 days after 3-3-78. (t = 22; f = 29/30)

4 4

The general equation in paragraph (b)(8) of this section can be written in the special form:

$$7350 = \frac{1000 \ddot{a}_{\overline{3}|}}{(1+(12/30)i)(1+i)^6} + \frac{2000}{(1+(12/30)i)(1+i)^{12}} + \frac{750 \ddot{a}_{\overline{3}|}}{(1+(12/30)i)(1+i)^{18}} + \frac{1000}{(1+(29/30)i)(1+i)^{22}}$$

Annual percentage rate (I) = wi = .1022 = 10.22%

Example (iii): Mortgage with varying payments

A loan of \$39,688.56 (net) on 4-10-78 is to be repaid by 360 monthly payments beginning 6-1-78. Payments are the same for 12 months at a time as follows: