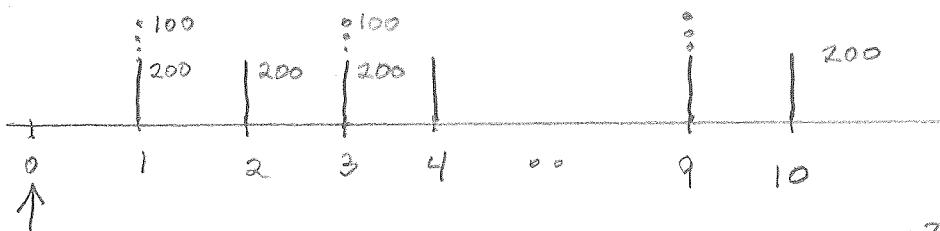


Exercise A loan is established with payments of \$200 at the end of every year for 10 years, plus an additional \$100 at the end of all odd numbered years. If the effective annual interest rate is 5%, find the amount of the loan.



$$(1.05)^2 = (1+i_x)$$

$$i_x = .1025$$

$$PV = L$$

$$= 200 a_{\overline{10}, 0.05} + 100 a_{\overline{5}, 0.1025} (1.05)$$

$$= 200(7.721734929) + 100(3.766699965)(1.05)$$

$$= 1939.85$$

$$= 200 a_{\overline{10}, 0.05} + 100 \ddot{a}_{\overline{5}, 0.1025} \left(\frac{1}{1.05} \right)$$