Section 3.1 Additional Problems

1. An n payment interest only loan with interest rate i consists of $n-1$ payment of iL (the interest owed) and a last payment of $iL+L$. Show that the present value of these payments at interest rate i is L.
2. Suppose you borrow \$20,000 at an effective period rate of i. The loan will be paid back with 20 payments at the end of each period. Each payment will consist of \$1,000 plus the interest owed for that period. For example, the first payment will be \$1,000 + \$20,000i. Show that the present value of these payments at interest rate i is \$20,000.