

Problem 11

A home buyer wishes to borrow \$250,000 at an interest rate of 6% to finance the purchase. Assume that interest is compounded continuously and that payments are also made continuously.

- (a) Determine the maximum amount that this buyer can afford to borrow on a 20-year mortgage; on a 30-year mortgage.
- (b) Determine the total interest paid during the term of the mortgage in each of the cases in part (a).