

REI 432 - Real Estate Finance

Spring 2010

Dr. Kimberly Goodwin

Homework #1 - Due in class on Monday, February 22

Show all your work in solving the problems. You don't need to provide formulas but do need to show all calculator keystrokes to get full credit for your answers.

1. A fully amortizing constant payment mortgage loan is made for \$250,000 at 5% for 15 years.
 - a. Create an amortization table showing the following information for the first 3 months of payments: beginning balance, monthly payment, amount of monthly payment going to interest, amount of monthly payment going to principal, and outstanding loan balance after payment is received.
 - b. What is the outstanding loan balance at the end of the fifth year?
 - c. Create an amortization schedule like you did in part a but now assume the loan is a constant amortization mortgage rather than a constant payment mortgage.
2. A fully amortizing loan is made for \$100,000 at 7%. If loan payments are \$1000 per month, when will the loan be repaid?
3. A fully amortizing mortgage is made for \$200,000 for 20 years. The monthly payments on the loan are \$1375.77. What is the interest rate on the loan?
4. A fully amortizing constant payment mortgage is made for \$550,000 at 7% over 30 years. What are the payments on the loan? What is the outstanding balance after 3 years?
5. You are taking out a fully amortizing loan for \$150,00 over 30 years. You can choose between a loan at 4.75% with 2 points and a loan at 4.5% with no points. If you plan to stay in the home for 10 years, which loan will give you the lower effective borrowing cost?