

Assume you wish to borrow \$400,000 and you are evaluating two mortgage choices. The first option is a 4.00% fully amortizing, monthly payment, fixed rate loan for 30 years with \$2000 in origination fees and .974 points. (This loan may look familiar from Problem Set 3.) Because you are unable to put 20% down, you will need to pay property mortgage insurance (PMI) on the loan. You are presented with two options for paying the PMI. You may pay it upfront for a one time fee of 3% of the initial principal balance of the loan. Alternatively, you may pay an additional .8% (quoted annually) of the initial principal balance of the loan every month with your monthly payment. You may remove the PMI whenever you reach a 20% equity position in the property, according to the original loan amortization schedule. For this loan, that will occur in exactly 8 years.

- a) Which option is best if you will own the property for 5 years?
- b) Which option is best if you will own the property for 30 years or more?