

FINA635

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**In Class Practice Question**

Consider the mortgage question considered in class. Ten years ago you borrowed $3 million to purchase an office building. The mortgage has a 7.80% APR compounded monthly and includes equal monthly payments for 30 years. We have calculated the monthly payment to be $21,596 and, since you have made all payments in the last ten years (120 monthly installments) the loan outstanding is $2,620,759.

Over the last ten years, interest rates have dropped and currently stand at 7.2% APR for mortgages of between 15 to 30 years.

1. If you refinance your mortgage – i.e., you take on a new 7.2% APR mortgage for the above outstanding balance amount of ~$2.6 million and use the proceeds to totally payoff the old mortgage – what will your new payments be? (Suppose you take the new mortgage for 20 years).
2. Taking on a new mortgage costs about 1.5 points in fees – or in other words, you need to pay the mortgage broker fees of 1.5% of the size of the mortgage loan. So here about $39K in fees. Should you refinance?

Take a few minutes to work on this in groups and we’ll cover it in class soon.

Good luck!