Problem set 1

Write your answers in the indicated spaces. Use a calculator to get your final answers, but I want you to **write out the algebraic formulas** you use to get the answers.

1) A bond that promises a payment of $1,000,000 exactly one year from today can be bought for $900,100 today.

a) What is the yield to maturity on this bond?   _____

b) Given the answer you got for part a), what price would you expect to receive today if you sold a bond that promises a payment of $50,000 exactly one year from today?

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2) A bond that promises a payment of $5,000,000 exactly nine years from today can be bought for $1,000,000 today. What is the yield to maturity on this bond?

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3) Suppose the yield to maturity for bonds that pay off one year from today is 5%, and the yield to maturity for bonds that pay off two years from today is 10%. What will be the market price of a bond that makes *two* payments: a payment of $100 one year from today, and a payment of $1,000 two years from today?

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