Directions: The following is (optional) extra credit for Test 2. It’s take home, so it’s open book and open note. You are allowed to ask me (Dr. Jackie Kaminski) any questions you would like, either in person or over email. You may not discuss this with any other human (in person or digitally). However there’s no reason you couldn’t discuss other HW questions with your classmates. You must show all work to get any credit on this assignment. This is a take home extra credit assignment, if you don’t put in the time to get the questions right, don’t expect to earn points.

0. I ____________________ have read the directions, and I have not discussed, or shared my work with anyone (other than Dr. Kaminski).

Name ____________________ Date ____________________

1. (3 points) Amazon.com has $1,000 par value bonds with a maturity date of Dec. 5, 2034. The coupon rate is 4.8%. Currently (Nov 12, 2015) the bonds are selling at a $55.10 premium.

   (a) Describe all payments the owner of this bond will receive, including the timing of the payments. You should be answering using sentence(s), and should include any necessary calculations.

   (b) What is the current yield of this bond?
2. (2 points) Microsoft Stock (MSFT) is currently (Nov 12, 2015) selling for $53.30 a share. Three years ago (Nov 12, 2013) it was selling for $28.94. In November 2015 Microsoft stock had a quarterly dividend of $0.36, in August 2015 Microsoft stock had a quarterly dividend of $0.31, in May 2015 Microsoft stock had a quarterly dividend of $0.31, and in February 2015 Microsoft stock had a quarterly dividend of $0.31.

(a) Find the CAGR for Microsoft stock over the past 3 years.

(b) i. Find the current dividend yield of Microsoft stock.

   ii. Find the trailing dividend yield for Microsoft stock.

3. (2 points) Consider the Amazon Bonds in question 1 and the Microsoft stock in question 2.

   (a) What quantities (numbers) should we use to compare the potential returns/profits from these two investments? (explain/justify)\(^1\)

   (b) Discuss the Pros/Cons for Amazon Bonds and Microsoft Stocks in terms of both part (a) and risks. There may be a clear winner, or there may be pros and cons to each.

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\(^1\text{If you’re confused by the question, some quantities involved in these questions are: current yield, CAGR, selling price, premium, coupon payment, coupon rate, par value, dividend yield, etc. We should compare } \underline{\text{n}} \underline{\text{for Amazon bonds to }} \underline{\text{for Microsoft stock}}\)
4. (5 points) Indecisive Ivan has 58 monthly payments of $568 left on a loan for his small business at 4.79%. Ivan also has 22 years of $775.50 monthly payments left on his mortgage at 4.12%. The remaining balance on his mortgage is $134,484.45.

Ivan is considering consolidating the business loan and the old mortgage into a new 20 year mortgage at 3.89%.

(a) What is the remaining balance on Ivan’s business loan?
(b) If Ivan stays with the existing business loan and old mortgage, how much will he spend repaying his debts?
(c) If Ivan decides to consolidate/refinance, what will his new monthly payments be?
(d) Give Indecisive Ivan a summary to help him decide between his two options (keep his debts the same vs consolidate/refinance). You should be answering in sentences and should consider the monthly costs and the longterm costs of each option.