

## Session 7: Post Class tests

1. You are valuing a US treasury bond with ten years left to maturity and a 2.5% coupon rate. If the current market interest rate is 2% and the coupons are paid annually (at the end of each year), estimate the market value of the bond. (The face value of the bond is \$1000)
  - a. \$800
  - b. \$956
  - c. \$1045
  - d. \$1225
  - e. None of the above
2. Assume that the price of the bond described above, with a 2.5% coupon rate and 10 years to maturity, increases to \$1100, Estimate the yield to maturity on the bond. (If you are working by hand, find the closest approximation.)
  - a. 1.4%
  - b. 1.6%
  - c. 1.8%
  - d. 2.0%
  - e. 2.2%
3. Which of the following bonds is most sensitive to a given change in interest rates?
  - a. A 5-year bond with a 2% coupon rate
  - b. A 5-year bond with a 4% coupon rate
  - c. A 10-year bond with a 2% coupon rate
  - d. A 10-year bond with a 4% coupon rate
4. You are looking at a company that has been downgraded from BBB to BB by S&P and trying to estimate the effect of the ratings downgrade on its bonds. The company has 10-year, 4% coupon bonds that were trading at par (face value) before the downgrade, and it expects the downgrade to increase its default spread by 1.5%. Estimate the percentage change in the bond price, assuming annual coupons.
  - a. +23.1%
  - b. -2.3%
  - c. -9.0%
  - d. -11.3%
  - e. None of the above