Session 7: Post class test solutions

1. **c. $1.045.** PV of $25 a year for 10 years @2% + PV of 1000 at the end of year 10 = $1045
2. **a. 1.4%.** This is the rate that gives you a present value of $1,100 when you take the present value of $25 a year for 10 years and $1000 at the end of year 10.
3. **c. A 10-year bond with a 2% coupon rate.** The longer the maturity of the bond and the lower the coupon rate, the more sensitive the value will be to changes in interest rates.
4. **d. -11.3%.** The bond was trading at par before the downgrade. So, the market interest rate = coupon rate = 4%, before the downgrade. After the downgrade, that rate jumps to 5.5%. Keeping the coupons ($40/year) and face value ($1000) fixed, the price of the bond will drop to $887 (discounting the cash flows at 5.5%).