1. A $1000 face value bond has a remaining maturity of 8 years and a required return of 11%. The bond’s coupon rate is 6%. What is the fair value of the bond?
2. Assume ABC is expected to pay a total cash dividend of $7.50 next year and its dividends are expected to grow at a rate of 5% per year forever. Assuming annual dividend payments, what is the current market value of a share of ABC stock if the required return on ABC common stock is 9%?
3. ABC $4.25 preferred is selling for $50.75. The preferred dividend is non-growing. What is the required return on ABC preferred stock?
4. Suppose ABC has non-maturing (perpetual) preferred stock outstanding that pays $2.20 per quarter and has a required return of 8% (2% per quarter). What is the stock worth?
5. ABC has many bonds trading on the NYSW. Suppose ABC’s bonds have identical coupon rates of 8.75% but that one issue matures in 1 year, one in 5 years, and the third in 10 years.
   1. If the yield to maturity for all three bonds is 7%, what is the fair price of each bond?
   2. If the yield to maturity for all three bonds is 6%, what is the fair price of each bond?
   3. If the yield to maturity for all three bonds is 8%, what is the fair price of each bond?
   4. Based on the fair prices at the various yields to maturity, is interest rate risk the same, higher, or lower for longer vs shorter maturity bonds?
6. You buy a very risky bond that promises a 12% coupon and return of the $1000 principle in 5 years. You pay only $500 for this bond.
   1. You receive the coupon payments for 2 years and the bond defaults. After liquidating the firm, you receive a distribution of $150 at the end of 2.5 years. What is the realized return on your investment?
   2. The firm does better than expected and you receive all of the promised interest and principle payments. What is the realized return on your investment?
7. ABC is a profitable firm that is not paying a dividend on its common stock with a required return of 10%.
   1. If ABC begins paying a $1.50 per share dividend in 3 years and increases 5% annually thereafter, what value would you estimate for ABC?
   2. If ABC begins paying a $1.50 per share dividend in 4 years and increases 4% annually thereafter, what value would you estimate for ABC?
8. The riskless return is currently 8% and ABC has estimated the contingent returns given here.
   1. Calculate the expected return on the stock market.
   2. Calculate the expected return on ABC.
   3. Calculate Beta for ABC.
   4. Calculate the required return for ABC according to the CAPM.

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| State of the Market | Probability that State Occurs | Realized Return for Stock Market | Realized Return for ABC |
| Stagnant | .25 | -.05 | -.10 |
| Slow Growth | .30 | .05 | .10 |
| Average Growth | .25 | .10 | .20 |
| Rapid Growth | .20 | .20 | .30 |