

**ADDITIONAL PROBLEMS FOR CHAPTER 4**

- 4-19** Interest rates on 1-year Treasury securities are currently 5.6 percent, while 2-year Treasury securities are yielding 6 percent. If the pure expectations theory is correct, what does the market believe will be the yield on 1-year securities 1 year from now?
- Expected rate of interest**
- 4-20** Assume that the real risk-free rate, k^* , is 3 percent and that inflation is expected to be 8 percent in Year 1, 5 percent in Year 2, and 4 percent thereafter. Assume also that all Treasury bonds are highly liquid and free of default risk. If 2-year and 5-year Treasury bonds both yield 10 percent, what is the difference in the maturity risk premiums (MRPs) on the two bonds; that is, what is MRP_5 minus MRP_2 ?
- Maturity risk premium**
- 4-21** Given the following data, find the expected rate of inflation during the next year.
- Expected inflation**
- k^* , real risk-free rate, is 2.75 percent.
 - Maturity risk premium on 10-year T-bonds is 3 percent. It is zero on 1-year bonds, and a linear relationship exists.
 - Default risk premium on 10-year, A-rated bonds is 1.25 percent.
 - Liquidity premium is zero.
 - Going interest rate on 1-year T-bonds is 5.35 percent.
- 4-22** Assume all the facts as given in Problem 4-21. In addition, assume that 10-year Treasury bonds currently yield 9.25 percent. What is the average inflation rate expected during the next 10 years?
- Average inflation rate**

