1. Suppose prices  for risk-free zero coupon bonds of 100 face value  
  with different maturities are:  
  1 year 93.50, 2 years 85.75, 3 years 77.25  
  Determine the discount rate for one, two and three-year cash flows.  
  
2. A risk-free 5% annual coupon bond has  
a remaining maturity of three years, just having paid its annual interest.  
Based on the discount rates determined above, what is its current value?  
what is PV of interest year 1, 2, 3, Redemption and Total.  
  
3. Is this a par, premium or discount bond?  
  
4. Compute the current yield of that bond. (Current Yield  
  is the ratio of the annual interest payment and the bond's  
  current clean price)  
  
5. Now state the general relationship between coupon rate and current  
  yield for  
  a) Par bonds b) Discount bonds c) Premium bonds  
  
6.Explain what a swap rate is. What is the relationship between swap  
  rates and par yields.  
  
7. The 1 year Libor rate is 10%. A bank trades swaps where a fixed rate of interest is   
exchanged for 12 months Libor with payments being  
exchanged ANNUALLY (yes annually). The 2 and 3 year swap rates for  
annually payment exchange swaps are 11% and 12%. Estimate the 2 and 3 year  
Libor zero rates.  
  
8.A corporate treasurer tells you that he has just negotiated a 5  
  year loan at a competitive fixed interest rate 5.2%  
  The treasurer explains that he achieved the 5.2% rate by borrowing at  
  6-month Libor plus 150 basis points asnd swapping Libor for 3.7%  
  He goes on to say that this is possible because his company has a  
  comparative advantage in the floating rate market.  
  What has the treasurer overlooked.