1. A report found that the real entry-level wage for college graduates declined by 8 percent between 1990 and 1997. The nominal entry-level wage in 1997 was $13.65 per hour. What was the nominal entry-level wage in 1990?
   (CPI in 1990 is 1.307, in 1997 is 1.605, using 1982-84 as the base period.)

2. The typical consumer’s food basket in the base year 2008 is as follows:
   - 30 chicken at $3.00 each
   - 10 hams at $6.00 each
   - 10 steaks at $8.00 each

   A chicken feed shortage causes the price of chickens to rise to $5.00 each in the year 2009. Hams rise to $7.00 each, and the price of steaks is unchanged.


    b. Suppose that consumers are completely indifferent between two chickens and one ham. For this example, how large is the substitution bias in the official “cost-of-eating” index?
3. Frank is lending $1000 to Sarah for two years. Frank and Sarah agree that Frank should earn a 2 percent real return per year.
   a. The CPI (times 100) is 100 at the time that Frank makes the loan. It is expected to be 110 in one year and 121 in two years. What nominal rate of interest should Frank charge Sarah?

b. Suppose Frank and Sarah are unsure about what the CPI will be in two years. Show how Frank and Sarah could index Sarah’s annual repayments to ensure that Frank gets an annual 2 percent real rate of return.