1.      The Gibbs Baby Food Company wishes to compare the weight gain of infants using their brand versus their competitor's.  A sample of 40 babies using the Gibbs products revealed a mean weight gain of 7.6 pounds in the first three months after birth.  The standard deviation of the sample was 2.3 pounds.  A sample of 55 babies using the competitor's brand revealed a mean increase in weight of 8.1 pounds, with a standard deviation of 2.9 pounds.  At the 0.05 significance level, can we conclude that babies using the Gibbs brand gained less weight?

2.      Ms. Lisa Monnin is the budget director for the New Process Company.  She would like to compare the daily travel expenses for the sales staff and the audit staff.  She collected the following sample information:

Sales Staff ($)     191     135     146     165     136     142
Audit Staff ($)    130     102     129     143     149     120     139

At the 0.10 significance level, can she conclude that the mean daily expenses are greater for the sales staff than for the audit staff?

3.     The research department at the home office of New Hampshire Insurance conducts on-going research on the causes of automobile accidents, the characteristics of drivers, and so on.  A random sample of 400 policies written on single persons revealed 120 had at least one accident in the previous three-year period.  Similarly, a sample of 600 policies written on married persons revealed that 150 had been in at least one accident in the previous three-year period.  At the 0.05 significance level, can the insurance company conclude that single persons are more prone to having accidents than married persons?