



2. In the 1980's it was generally believed that about 5% of all children in the U. S. were affected by congenital abnormalities. Some people believe that the increase in chemicals in the environment has led to an increase in the proportion of children in the U. S. with congenital abnormalities. A recent study examined 384 randomly selected children in the U. S. and found that 26 had congenital abnormalities. The conditions for doing a test of hypothesis are met, so you do not need to verify them.
- a) What is the population? Be specific.
  - b) What is the sample? Be specific.
  - c) What is the population parameter of interest?
  - d) Give a null and alternative hypothesis for the population parameter.
  - e) Compute the value of the test statistic and convert this to a P-value.
  - f) Use the P-value to make a decision whether or not to reject the null hypothesis.
  - g) State a conclusion, within the context of the problem.