were posted on the AOL site. How can the large discrepancy between the two polls be explained? Which poll is more likely to reflect the true opinions of American voters at the time of the poll?

7. Statistical Significance and Practical Significance The Gengene Research Group has developed a procedure designed to increase the likelihood that a baby will be born a girl. In a clinical trial of their procedure, 112 girls were born to 200 different couples. If the method has no effect, there is about a 4% chance that such extreme results would occur. Does the procedure appear to have statistical significance? Does the procedure appear to have practical significance?

8. Marijuana Survey In a recent Pew poll of 1500 adults, 52% of the respondents said that the use of marijuana should not be made legal. In the same poll, 23% of the respondents said that the use of marijuana for medical purposes should not be legal.

a. The sample of 1500 adults was selected from the population of all adults in the United States. The method used to select the sample was equivalent to placing the names of all adults in a giant bowl, mixing the names, and then drawing 1500 names. What type of sampling is this? (random, systematic, convenience, stratified, cluster)

b. If the sampling method consisted of a random selection of 30 adults from each of the 50 states, what type of sampling would this be? (random, systematic, convenience, stratified, cluster)

c. What is the level of measurement of the responses of yes, no, don't know, and refused to respond?

d. Is the given value of 52% a statistic or a parameter? Why?

e. What would be wrong with conducting the survey by mailing a questionnaire that respondents could complete and mail back?

9. Marijuana Survey Identify the type of sampling (random, systematic, convenience, stratified, cluster) used when a sample of the 1500 survey responses is obtained as described. Then determine whether the sampling scheme is likely to result in a sample that is representative of the population of all adults.

a. A complete list of all 241,472,385 adults in the United States is compiled and every 150,000th name is selected until the sample size of 1500 is reached.

b. A complete list of all 241,472,385 adults in the United States is compiled and 1500 adults are randomly selected from that list.

c. The United States is partitioned into regions with 100 adults in each region. Then 15 of those regions are randomly selected, and all 100 people in each of those regions are surveyed.

d. The United States is partitioned into 150 regions with approximately the same number of adults in each region, then 10 people are randomly selected from each of the 150 regions.

e. A survey is mailed to 10,000 randomly selected adults, and the 1500 responses are used.

10. Marijuana Survey Exercise 8 referred to a Pew poll of 1500 adults, and 52% of the respondents said that the use of marijuana should not be made legal.

a. Among the 1500 adults who responded, what is the number of respondents who said that the use of marijuana should not be made legal?

b. In the same poll of 1500 adults, 345 of the respondents said that the use of marijuana for medical purposes should not be legal. What is the percentage of respondents who said that the use of marijuana for medical purposes should not be legal?

c. In this survey of 1500 adults, 727 are men and 773 are women. Find the percentage of respondents who are men, and then find the percentage of respondents who are women.