

Stat 104 – Homework 1 Solution

Assignment:

1. Complete the following problems from the text: 1.7, 1.8, 1.19, 1.24, and 1.25.

If you have questions about the answers to the text problems, see your instructor.

2. ABC News and the Washington Post newspaper conducted a public opinion poll from August 13th through August 17th, 2009. 1,001 randomly selected adults from across the United States were contacted by telephone and asked the question, “Do you approve or disapprove of the way Barack Obama is handling his job as president?” 57% of the people contacted answered that they approve, 40% answered that they disapprove, and 3% were unsure. The poll has a margin of error of plus or minus 3.5 percentage points.

- a) Identify the population.

The population consists of all adults in the United States.

- b) Identify a population parameter of interest.

The proportion of all adults in the U.S. who approve of the way Barack Obama is handling his job as president.

- c) Identify the sample.

The sample consists of the 1,001 randomly selected U.S. adults.

- d) Identify a sample statistic that tells you something about the parameter you identified in b) and give its value.

A sample statistic is the 57% of the sample that approve of the way Barack Obama is handling his job as president.

- e) Explain how the margin of error provides an *inferential* statistical analysis.

The margin of error allow us to infer that between 53.5% and 60.5% of the entire adult population of the U.S. would say that they approve of the way Barack Obama is handling his job as president.