



6. A random sample of 10 markets in a large city gave the following prices for bananas in cents per pound:  
56, 57, 50, 53, 58, 57, 55, 54, 57, 52
- What is the random variable?
  - What do we know about the distribution of this random variable?
  - What is the point estimate for the population mean? Denote with the appropriate symbol.
  - Construct a 98% confidence interval for the population mean and interpret.
  - Suppose the confidence interval found in part d is too wide. How could we decrease the width?
7. In 1920 only 35% of U.S. households had telephones, but that rate is now much higher. In a recent survey of 4276 randomly selected households, 94% of them had telephones (based on data from the U.S. Census Bureau).
- What is the point estimate of the current percentage of U.S. households that have telephones? (Denote with the appropriate symbol.)
  - Find the 99% margin of error for the point estimate and interpret.