Warm-up:

1. From a random sample of 64 dates, the mean record high temperature in the Chicago, Illinois, area has a mean of 84.13°F. Assume the population standard deviation is 14.56°F. Construct a 90% confidence interval for the population mean. Interpret the results. (2 decimal places)

2. In a random sample of 8 cell phones, the mean full retail price was $526.50 and the standard deviation was $184.00. Assume the population is normally distributed. Construct a 90% confidence interval for the population mean. Interpret the results. (2 decimal places)

3. In a survey of adults in the United States, about 32% believe national identity is strongly tied to birthplace. Construct a 90% confidence interval for the population proportion. Interpret the results. (3 decimal places)