1. Find the 95% confidence interval for the number of heads obtained when tossing a fair coin 100 times.

2. Suppose thumbtacks have a probability of landing point down 60% and point up 40%. Give a 99.7% confidence interval for the percent of tacks landing point up when dropping 24 onto the floor. Give a 99.7% confidence interval for the number of tacks landing point up under the same conditions.

3. Your machine produces Big Red candy bars with a mean weight of 6.58 ozs. and a standard deviation of .06 ozs. To keep watch on the machine you carefully check a sample of nine bars every hour. Find the limits on the mean weight of a sample of nine bars which would indicate that with 95% confidence the machine is out of adjustment.