Problem 1. Suppose you calculate a sample mean of $\bar{x} = 1.42$ with sample standard deviation of S = 35.52. There are n = 274 observations. Find the 95% confidence interval.

Problem 2. Now find the 90% confidence interval.

Problem 3. Suppose you calculate a sample mean of $\bar{x}=1.42$ with sample standard deviation of S=35.52. There are n=274 observations. Test that $\mu=0$ with 95% confidence.

Problem 4. What is the probability of observing a T(273) draw that is greater in magnitude than |0.66|?