Name:

Quiz 5, Attempt 1

Suppose you have a random sample of size 31 from a normal population with unknown mean and variance. Find a 90% equal tailed confidence interval for the **standard deviation** of the population. The outcome of the sample mean is 250 and the outcome of the sample standard deviation is 10.

Quiz 3, Attempt 2

Suppose you have a random sample of size 31 from a normal population with unknown mean and a variance of 20. Follow the steps to creating a 90% one-sided lower confidence limit for the mean of the population. The outcome of the sample mean is 250.

Step 1: Write down a probability statement involving the sample mean.

Step 2: Isolate the population mean in the probability statement.

Step 3: Write down the random interval, which will contain the population mean with probability 90%.

Step 4: Write down the outcome of the random interval (interval estimator). This is a 90% confidence interval (interval estimate). Then write down the one-sided lower 90% confidence limit.