1. Find the critical t-values for making a 95% confidence interval for each of the following *degrees of freedom*: 1, 2, 5, 15, 30, 50, 100, 250. What do you notice?
2. In a random sample of 20 Stat 113 students, the average pulse rate was 73.20 beats per minute (bpm), with a standard deviation of 5.72 bpm. A histogram of the sample data is provided below. Construct and interpret a 90% confidence interval for the mean pulse rate for all Stat 113 students.



1. An online source reports that the average cost of a haircut in the US is $53. On the first day survey in a recent semester, 191 students reported how much they spent on their most recent haircut. From the sample, the average amount spent was $39.61, with a standard deviation of $47.96. A boxplot of the sample data is provided below.

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| a. Does this sample provide evidence that the average amount spent on a haircut for SLU students differs from the national average? |  |

* 1. Construct and interpret a 98% confidence interval for the mean amount spent on haircuts for all SLU students.