STEP	Sample Proportions	Sample Means
State	We want to find the true proportion of ______________ with ___% confidence. $\hat{p}$ = ___	We want to find the true mean of ______________ with ___% confidence. $\bar{x}$ = ___
Plan	Check the following conditions: **Random**: Check to make sure the sample was taken randomly. **10% condition**: (allows us to calculate SE) Check to make sure that 10 times our sample is less than the entire population. **Large Counts**: n$\hat{p} \geq 10$ n$\hat{q} \geq 10$ *Because our conditions are met, we will use a 1-proportion z-interval to estimate p.*	Check the following conditions: **Random**: Check to make sure the sample was taken randomly. **10% condition**: (allows us to calculate SE) Check to make sure that 10 times our sample is less than the entire population. **Normal/Large**: n ≥ 30 If n < 30, we must look at a graph of our data: • Rough sketch • No strong skewness • No outliers *Because our conditions are met, we will use a 1-sample t-interval to estimate μ.*
Do	First, calculate the critical value based on your chosen confidence level. On the calculator, choose: 2nd DIST → 3. invNorm(percentile) Plug numbers into the following: $\hat{p} \pm z^* \sqrt{\frac{\hat{p}\hat{q}}{n}}$ = (____, ____)	First, calculate and list the following: **df =** ____ t^*_{df} **=** ____ where t* is the critical value calculated from the boundary of the confidence level chosen and from the degrees of freedom for the sample size chosen. On the calculator, choose: 2nd DIST → 4. invT(percentile, df) Plug numbers into the following: $\bar{x} \pm t^* \frac{s_x}{\sqrt{n}}$ = (____, ____)
Conclude	We are ___% confident that the interval from (____, ____) captures the true proportion of ______________.	We are ___% confident that the interval from (____, ____) captures the true mean of ______________.