* Numerical Data
  + Raw data. Real numbers
  + Summarized data. Mean/average, std. dev., etc

1. Describe the sampling distribution. This is the theory. The problem gave you ​µ, gave you σ​ Explain using shape, center, spread If sample is bigger than 30, or if the population is normal, then the sample is normal. This describes the sample’s shape. The center is µ ​ Spread is the standard error, found by ​
2. Build a CI around µ ​. This is inferential statistics. use technology The interpretation of a CI is about the population You MUST say “TRUE MEAN”/“POPULATION MEAN”/etc
3. Have you met normality assumption? Either check sample size, or build an NPP, ensure that the ​p>0.05
4. What if the sample size increased?  
   explain that n changes
5. What if the confidence interval changes? explain that t is changing

* Categorical Data
  + Mentions count
  + Mentions percentage

1. Describe sampling distribution. Shape: if ​ ☑️ center: p/​ spread: ​
2. Build a CI about P use ​ to talk about ​p
   1. 645=Z for 90%
   2. 1.96=z for 95%
   3. 2.576= z for 99%

This is important for estimating sample size Ensure that the interpretation is about the true proportion

Normality Assumption? see q1 shape

1. The true mean of RIT credit card student debt is betwee $$150 and $3500
2. Is $2k reasonable? Yes.
3. Is AT MOST $2k reasonable? No.

Numerical:

Find N. given: std. dev, confidence level, margin of error calculate as such:

Categorical data:

1. Find N. given: ​ (if not given, use 0.5), level of confidence, and margin of error Calculate as such: