A theorem that states: the larger the sample size, the closer our statistic gets to the parameter.	Law of Large Numbers
A theorem that states: if our sample size is large enough, the sample mean will be normally distributed.	The Central Limit Theo
Describing the data we have collected.	Descriptive Statistics
Using the data we have collected to draw conclusions about our population of interest.	Inferential Statistics

Recap

In this lesson, you have learned a ton! You learned:

Sampling Distributions

- **Sampling Distributions** are the distribution of a statistic (any statistic).
- There are two very important mathematical theorems that are related to s **The Law of Large Numbers** and **The Central Limit Theorem**.
- **The Law of Large Numbers** states that as a sample size increases, the sar closer to the population mean. In general, if our statistic is a "good" estima will approach our parameter with larger sample sizes.
- **The Central Limit Theorem** states that with large enough sample sizes ou follow a normal distribution, but it turns out this is true for more than just

Bootstrapping

- **Bootstrapping** is a technique where we sample from a group with replace
- We can use bootstrapping to simulate the creation of sampling distributior times in this lesson.
- By bootstrapping and then calculating repeated values of our statistics, we understanding of the sampling distribution of our statistics.

Looking Ahead

In this lesson you gained the fundamental ideas that will help you with the next about sampling distributions and bootstrapping. These are going provide the ba **intervals** and **hypothesis testing** in the next two lessons.