**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 sampling distributions: **The Law of Large Numbers** and **The Central Limit Theorem**.
* **The Law of Large Numbers** states that as a sample size increases, the sample mean will get closer to the population mean. In general, if our statistic is a "good" estimate of a parameter, it will approach our parameter with larger sample sizes.
* **The Central Limit Theorem** states that with large enough sample sizes our sample mean will follow a normal distribution, but it turns out this is true for more than just the sample mean.

**Bootstrapping**

* **Bootstrapping** is a technique where we sample from a group with replacement.
* We can use bootstrapping to simulate the creation of sampling distribution, which you did many times in this lesson.
* By bootstrapping and then calculating repeated values of our statistics, we can gain an understanding of the sampling distribution of our statistics.