Unit #5: 2+ Sample Hypothesis Testing

Content Area: **Mathematics**
Course(s): **Statistics H**
Time Period: **Semester 1 & 2**
Length: **4 weeks**
Status: **Published**

Standards

MA.K-12.3	Construct viable arguments and critique the reasoning of others.
MA.S-IC.A.1	Understand statistics as a process for making inferences about population parameters based on a random sample from that population.
MA.S-IC.B.4	Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.
MA.S-IC.B.5	Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.

Enduring Understandings

1) Recognizing that while certain computations of hypthesis tests involving more than one sample may differ, the overall format always remains the same.

2) Understanding how, and when Analysis of Variance hypthesis testing is used.

Essential Questions

1) Will students be able to differentiate between and perform hypothesis tests involving 2 or more samples of means, proportions, standard deviations, or variances?

2) Will students be able to differente when to use 1 or 2-way Analysis of Variance?

Knowledge and Skills

1) Students will perform hypothesis tests comparing two standard deviations, variances, means, and proportions

2) Recognize the differences between and calculate 1 and 2-way Analysis of Variance tests when comparing more than two means

Resources

Elementary Statistics 10th Edition

https://doralacademyprep.enschool.org/ourpages/auto/2015/8/18/48840047/Elementary%20Statistics%2010e.pdf