

## **Math Virtual Learning**

# AP stats / Probability Review

May 5th, 2020



Lesson: May 5th, 2020

Objective/Learning Target:
Students will review the material in the probability unit.

#### Review #1

#### Sampling error is...

- a. The mean of a sample statistic
- b. The standard deviation of a sample statistic
- c. The standard error of a sample statistic
- d. The result of bias
- e. The difference between a the population parameter and an estimate of that parameter

#### Review #2

Which of the following are true statements about blocking?

- 1. Blocking is to experimental design as stratification is to sampling design
- 2. By controlling certain variables, blocking can make conclusions more specific.
- 3. The paired comparison design is a special case of blocking.

#### Answers

- The answer is E. sampling error is how far off your guess is from the truth.
   Out guess being our sample statistic. Our confidence interval is a method of trying to account for this error.
- 2. All three are true. Blocking and stratification are both methods that split your group by a variable. Blocking accounts for variables and allows more specific comparisons. Matched pairs is still a blocking design, just the extreme version of it.

### Probability!

This is usually one of the areas that students score the lowest on AP tests. So it is definitely worth some time reviewing. The big issues here is that the concept is more abstract than a lot of other material we cover, and there are a lot of rules that work only under certain conditions. We need to be familiar with independent and dependent events, mutually exclusive events, both addition rules, both multiplication rules, unions (or), intersections (and), conditional probabilities, the relationship between independence and conditional probabilities, marginal probabilities, and reading two way tables. There is just a lot here. Please review the following video and attempt the extra practice.

**Probability Review** 

#### **Extra Practice**

Free Response Question

**Answer Key**