

## Chapter 8: Sampling Distributions and Hypothesis Testing

1. What is a sampling distribution?
2. What is sampling error?
3. What is the standard error of the mean?
4. What do we mean by hypothesis testing?
5. What is a research hypothesis?
6. What is the null hypothesis?
7. Why do we test the null hypothesis instead of the alternative hypothesis?
8. What is another term for the rejection level?
9. What is Type II Error?
10. What is a critical value?

## Chapter 12: Hypothesis Tests Applied to Means: One Sample

1. What 3 things does the central limits theorem tell us?
2. Why do we care about the standard error of a statistic?
3. How does the formula for  $t$  differ from the standard formula for  $z$ ?
4. Why is the sampling distribution of the variance relevant to the use of  $t$ -tests?
5. When we are dealing with one set of scores, the degrees of freedom for  $t$  will be \_\_\_\_\_?
6. Name 3 things that affect the size of the  $t$  we calculate:
7. What do we mean when we speak of an “effect size measure”?
8. What do we mean by a confidence interval?
9. What do we mean by Cohen’s effect size mean,  $d$ ?
10. What is the sampling distribution of  $t$ ?

### **Chapter 13: Hypothesis Tests Applied to Means: Two Related Samples**

1. What do we mean by matched or dependent samples?
2. List a major advantage of matched/dependent samples design.
3. What is the usual null hypothesis with matched / dependent samples?
4. Give 2 advantages of matched/dependent-samples study over a study with independent groups?
5. What is a carry-over or order effect?