

Lab section: \_\_\_\_\_

Your initials: \_\_\_\_\_

Psy 10, Fall 12, Quiz 1

1. A jury must decide whether a person convicted of murder is innocent. In this scenario, a type I error is made if a jury decides that a person is guilty when he or she is innocent.
  - a. True
  - b. False
  
2. Researchers report that the lesion of hippocampus led to a significant drop in rat's performance, with  $p = 0.04$ . This means that if another group of researchers have attempted to replicate this experiment, they would have a 96% chance of obtaining similar results.
  - a. True
  - b. False
  
3. A doctor must decide whether the lab results mean that a patient is free of cancer. In this scenario, a null hypothesis is that the patient does not have cancer.
  - a. True
  - b. False
  
4. You read in a scientific article that high school students who had breakfast score significantly higher on a memory test than students who have not had breakfast. This means that the difference obtained by scientists is unlikely to have occurred by chance.
  - a. True
  - b. False
  
5. Researchers have compared the tests scores of students who are taking the lecture-based course with the test scores of students who are taking the same course online. In this study, finding no significant difference between the two sets of test scores means that the null hypothesis is proven to be true.
  - a. True
  - b. False
  
6. When researchers report that the difference between two means is significant with probability value of 0.03, this means that there is 97% probability that their alternative hypothesis is true.
  - a. True
  - b. False

Lab section: \_\_\_\_\_

Your initials: \_\_\_\_\_

Psy 10, Fall 12, Quiz 2

1. A jury must decide whether a person convicted of murder is innocent. In this scenario, an alternative hypothesis is that a person is guilty.
  - a. True
  - b. False
  
2. You read in a scientific article that people who drink 1-2 cups of coffee a day are significantly less likely to have Alzheimer's disease later in life. This means that the difference in probability of having Alzheimer's disease is unlikely to have been obtained due to random error.
  - a. True
  - b. False
  
3. Next day, you read another article that states that people who drink more than 4 cups of coffee a day are more likely to suffer from a heart attack, with a  $p=0.01$ . This means that if another group of researchers have attempted to replicate this experiment, they would have a 99% chance of obtaining similar results.
  - a. True
  - b. False
  
4. A doctor must decide whether the lab results mean that a patient is free of cancer. In this scenario, a type II error is made if a doctor decides that a patient is cancer-free when he or she does have cancer.
  - a. True
  - b. False
  
5. When researchers report that one drug is more effective than another for treating depression, with a probability value of  $p = 0.01$ , this means that there is 1% probability that there is no difference between the two drugs.
  - a. True
  - b. False
  
6. Many studies have reported no significant differences between different types of psychotherapies on treatment of psychological disorders. This proves that any psychotherapy is equally successful when it comes to treating psychological disorders.
  - a. True
  - b. False

