**STAT 101**

**CA#2**

**2.6.20 :: Due 2.11.20**

**CLASS ASSIGNMENT #2 [10 points]:**



* **NOTE: THIS IS A GRADED ASSIGNMENT: TUTORS OR ACCESSIBILITY RESOURCES PERSONNEL SHOULD NOT ASSIST IN ITS COMPLETION.**
* **Problem point values and point credit distributions are included in brackets [ ]. General Grading: -.5 for first error; -1 to -2 for multiple errors; 0 minimal effort/not attempted/incorrect.**
* **ASSIGNED PROBLEMS:** 
  + **PROBLEM SET #1: 8:30: Abrams - Cox; 10: Bentley - Dolan; 2:30: Ayala - Demcak**
  + **PROBLEM SET #2: 8:30: Diliberto – Ibrahim; 10: Forman - Lopez; 2:30: Dickinson - Pixley**
  + **PROBLEM SET #3: 8:30: James - Weissman; 10: Mazzella - Wyble; 2:30: Quezada - Vicino**

**PLACE ALL ANSWERS HERE:**

1. **Sampling Approach: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Probability sampling occurs when: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

5) Place contingency table here showing variables and counts only, no percent values.

1. **Calculation answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Permutation/Combination is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **Contingency Table Percent: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **Horse Racing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **Genes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PROBLEM SET #1: Place answers above**

1. [1] Identify the sampling approach: You are collecting data for a business project, and you ask five of your friends for their responses to the survey. SAMPLING APPROACH: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. [1] Identify when in systematic sampling probability sampling occurs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. [2] Calculate the value of A:  ANSWER: A = \_\_\_\_\_\_\_\_\_\_
4. [2] Permutation/Combination: Determine the number of different samples of size 20 that could be obtained from a population containing 25 objects. NUMBER OF SAMPLES: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. [2] Contingency Table: Given the following information determine the percent of males who were left-handed: Females 20, 19 right-handed; Males 30, 28 right-handed. PERCENT OF MALES, LEFT-HANDED: \_\_\_\_\_\_\_\_\_\_\_\_\_
6. [1] Refer to Yellow #4. Answer part a) of the Horse Racing problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. [1] Refer to Yellow #4. Answer part a) of the Genes problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PROBLEM SET #2: Place answers on the front side**

1. [1] Identify the sampling approach: Your campus meal service company asks every tenth student his/her opinion of a new menu item. SAMPLING APPROACH: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Identify when in stratified sampling probability sampling occurs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. [2] Calculate the value of B:  ANSWER: B = \_\_\_\_\_\_\_\_\_\_
4. [2] Permutation/Combination: Determine the number of different samples of size 15 that could be obtained from a population containing 25 objects. NUMBER OF SAMPLES: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. [2] Contingency Table: Given the following information determine the percent of right-handed individuals who were females: Females 20, 19 right-handed; Males 30, 28 right-handed. PERCENT OF RIGHT-HANDED, WHO WERE FEMALES: \_\_\_\_\_\_\_\_\_\_\_\_\_
6. [1] Refer to Yellow #4. Answer part b) of the Horse Racing problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. [1] Refer to Yellow #4. Answer part b) of the Genes problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PROBLEM SET #3: Place answers on the front side**

1. [1] Identify the sampling approach: The college would like to determine student attitudes towards online learning. One class is randomly selected and all students in the class are surveyed. SAMPLING APPROACH: \_\_\_
2. [1] Identify when in simple random sampling probability sampling occurs: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. [2] Calculate the value of C:  ANSWER: C = \_\_\_\_\_\_\_\_
4. [2] Permutation/Combination: Determine the number of different samples of size 10 that could be obtained from a population containing 25 objects. NUMBER OF SAMPLES: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. [2] Contingency Table: Given the following information determine the percent of all individuals who were left-handed females: Females 20, 19 right-handed; Males 30, 28 right-handed. PERCENT OF ALL INDIVIDUALS WHO WERE LEFT-HANDED, FEMALES: \_\_\_\_\_\_\_\_\_\_\_\_\_
6. [1] Refer to Yellow #4. Answer part a) of the Horse Racing problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. [1] Refer to Yellow #4. Answer part c) of the Genes problem. ANSWER = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_