

## Review DATA

- 1) A drug test randomly selects one of three treatments for each participant. This is an example of
- 2) A marketing firm interviewed 80 shoppers randomly selected from the 4000 customers at one of the mall's 45 stores yesterday. The sample in this situation is the
- 3) A survey on the benefits of jogging is conducted outside a sporting-goods store. This is an example of
- 4) A well-designed survey should minimize
- 5) Five workers each sample 50 students to determine their favorite fast-food restaurant. Each worker returns with slightly different results. This is probably due to
- 6) Here is a list of random numbers: 16807 64853 17463 14715. Use this list to choose 3 numbers from the set  $\{1, 2, 3, \dots, 20\}$ . What are the numbers?
- 7) If Adam's sample statistic has a margin of error of 3% and Ben's sample statistic has a margin of error of 5%, then
- 8) In a district with 37,500 voters, 1500 are sampled and 1200 prefer your candidate. The preference percent of the sample is
- 9) In an election for mayor, there are 3 candidates and 24,000 eligible voters. A newspaper interviews 240 voters as they come out of the polls. The population here is the
- 10) To determine the food preferences of students, a staff member surveys students as they exit a local bar. This type of sample is a

Use the table of random digits on page 174 to answer the following questions.

- 11) The GM plant in Shreveport wants to run a quality check on 15 of 50 trucks that have come off the assembly line. Explain how this could be done and then use line 140 to select the 15 trucks.
- 12) Use the same problem above but start on line 114 to select the 15 trucks.
- 13) Explain why using a table of random digits is beneficial.

- 14) I want to give a special assignment to 5 of the students in this class. Use line 125 to pick the students.

ANDERSON, ASHELY

ARAUJO, GABRIEL V

ARITA, SELVIN

AUBRY, JOSEPH II

BUSTILLO, ELY

CASIMERE, JAYNEISHA R

CHINCHILLA MENDOZA, NAHOMY

CRUZ CONTRERAS, WILLIAM S

GANT, KIVIN

GUESS, MARCUS

HENDERSON, LYNIQUE

HOLMES, MARLON R JR.

JUAREZ, CELYNES

LOPEZ, CHRISTIAN A

PENA HERNANDEZ, JOSSELINE

RAMIREZ, JORGE A

RIVERA, ALEJANDRO JOSE

RIVERA-MARTINEZ, FRANKIE

VALENCIA, DAMIEN

VARNEY, FELCITY

WILLAIMS, RAYDEN A

- 15) Describe a method in which a double blind experiment to test the effectiveness of a drug could be run.

- 16) What is a double blind experiment and why is it critical to use double blind experiments to test medications?

- 17) Give 3 examples of a poll in which the sampling is biased?

- 18) Now describe how those 3 polls you chose could be sampled in an unbiased manner?

- 19) How could an experiment to compare the effectiveness of 2 medications be setup?

- 20) The Gallup Poll asked 501 teenagers whether they approved of legal gambling; 52 % said they did. Use the quick method to estimate the margin of error for conclusions about all teenagers.

- 21) Suppose the population of a small parish includes 10,404 registered voters. The local newspaper polled a random sample of 225 registered voters on a referendum issue and found 144 (64 %) to be in favor of the proposal. What is population, what is the sample, and what is margin of error?

- 22) What does increasing the sampling size do to the margin of error?

- 23) What does the margin of error in a poll indicate?