

# REVIEW FOR TEST # 1

Please get out your white boards

# 1.) Identify the population and the sample.

- (a) A study of 146 credit cards found that the average late fee is \$27.46.
- (b) Thirty-eight nurses working in the San Francisco area were surveyed concerning their opinions of managed health care.
- (c) Which part of the credit card study represents the descriptive branch of statistics?

## **2.) Determine whether the numerical value describes a parameter or a statistic.**

1.) After inspecting all of the 55,000 kg of meat stored at the Wurst sausage Company, it was found that 45,000 kg of the meat were spoiled.

2.) In a survey of 752 adults in the U.S., 42% think there should be a law that prohibits people from talking on cell phones in public places.

# Parameter vs. Statistic, cont'd

4.) Nineteen percent of a sample of Indiana ninth graders surveyed said they smoked cigarettes daily.

3.) After taking the first exam, 15 of the students dropped the class

### **3.) Determine which are qualitative data and which are quantitative data.**

- 1.) The monthly salaries of the employees at an accounting firm.
- 2.) The social security numbers of the employees at an accounting firm.
- 3.) The ages of a sample of 350 employees of a software company
- 4.) Type of car a sample of seniors have at NPA.
- 5.) The zip codes of a sample of 350 customers at a sporting goods store.

# Qualitative vs Quantitative, cont'd

4.) A college employs 85 faculty members. Select the numbers of the five members who serve in the tenure committee next year using a simple random sample.

16348 76938 90169 51392 55887 09209 79157

## 5.) Identify the set's level of measurement.

- (a) The daily high temperatures (in degrees Fahrenheit) for Mohave, Arizona, for a week in June are listed.

93 91 86 94 103 104 103

- (b) The EPA size classes for a sample of automobiles are listed.

subcompact   compact   midsize   large   compact  
large

# Level of Measurement, cont'd

- (c) Survey responses of “good, better, best”.
- (d) The heights (in inches) of the 2006 Los Angeles Sparks.
- (e) A collection of phone numbers.



## **6.) Decide which method of data collection you would use to collect data for the study.**

(a) A study of charitable donations of the CEO's in Syracuse, New York

(b) A study of the effect of kangaroos on the Florida Everglades ecosystem

(c) A study of college students' opinions on environmental pollution.

# Method of data collection, cont'd

(d) A study on the effect of low dietary intake of vitamin C and iron on lead levels in adults

(e) Researchers recorded the mouthing behavior on nonfood objects of children up to three years old.

## **7.) Identify which sampling technique was used in the study.**

(a) Calling randomly generated telephone numbers, a study asked 1001 U.S. adults which medical conditions could be prevented by their diet.

(b) A student asks 18 friends to participate in a psychology experiment.

(c) A pregnancy study in Cebu, Philippines, randomly selected 33 communities from the Cebu metropolitan area, then interviewed all available pregnant women in these communities.

# Sampling technique, cont'd

(d) Law enforcement officials stop and check the driver of every third vehicle for blood alcohol content.

(e) Twenty-five students are randomly selected from each grade level at a high school and surveyed about their study habits.

(f) A journalist interviews 154 people waiting at an airport baggage claim and asks them how safe they feel during air travel.

## **8.) Identify a bias or error that might occur in the indicated survey or study.**

(a) Calling randomly generated phone numbers, a study asked 1001 U.S. adults which medical conditions could be prevented by their diet.

(b) Law enforcement officials stop and check the driver of every third vehicle for blood alcohol content.

(c) A student asks 18 friends to participate in a psychology experiment.