

Answer Key for Unit 1 Test Review and Crossword Puzzle

Crossword puzzle:

Across

- 4) statistic
- 6) binary
- 7) cluster
- 8) categorical
- 9) discrete
- 10) sampling bias
- 12) observational unit
- 18) voluntary response
- 20) population
- 21) lurking variable
- 22) parameter
- 23) nonresponse
- 24) response
- 25) sample
- 26) variability

Down

- 1) convenience samples
- 2) systematic
- 3) quantitative
- 5) continuous
- 11) explanatory
- 13) data
- 14) stratified
- 15) variable
- 16) confounding variable
- 17) random
- 19) sampling frame

Review Packet:

- 1) a) cell phone calls
 - b) direction (binary); location (binary); day of week; weekday or weekend (binary)
 - c) length of call; time of day
 - d) no; they would have no way of knowing if a call is from your family
- 2) a) 0.75 b) 0.90
- 1) a) explanatory: gender of doctor
 - Response: # of C-sections performed
 - b) all OBGYN's
 - c) those doctors observed in Switzerland
 - d) observational study- the data was from surveying records
- 2) a) population: salaries of all pro-ball players sample: salaries of 2005 Red Sox
 - b) quantitative (continuous)
 - c) categorical (binary)
 - d) 0.71 0.29
 - e) statistics – numbers are from our sample
- 3) a) no, these are accomplished golfers so they are probably wealthy and athletic and certain ethnicities may be missing
 - b) yes, overestimate Republicans since wealthy people tend to vote Republican
 - c) yes, online – underrepresented since they are out golfing a lot with no internet access
 - cell phones – overrepresented since they have the money for cell phones and it would be the only way to reach them on the course
- 12) a) explanatory: whether they took the literature course
 - Response: whether they committed a new crime once paroled

- b) all prisoners
- c) the 72 prisoners chosen for this study
- d) observational study; just looked at whether they committed a crime after paroled (surveying records)
- e) committed 0.19 did not commit 0.81
- f) committed 0.45 did not commit 0.55
- g) statistics since the numbers came from the sample

12) a) cluster sample

- b) yes, high since they are the computer club they probably spend lots of time on the computers