

Sample Quiz 1A

Suppose for every email message that you receive in the next week, you keep track of

- Whether the message is spam
- Whether the sender is a family member, a friend, or someone else
- Whether the message contains an emoticon (such as a smiley face ☺)
- How many words are in the message
- What day of the week the message was sent

1. Which of these variables is quantitative?
2. How many of these variables are categorical? How many are binary?
3. What are the observational units in this study?
4. State a research question that you could address with these data.
5. Is *people who send you a message with an emoticon* a legitimate variable in this study? Explain why or why not.

Solution to Sample Quiz 1A

1. The quantitative variable is *how many words are in the message*.
2. Four of these five variables are categorical; two (the ones about spam, emoticon) are binary.
3. The observational units are the email messages that you receive next week.
4. Answers will vary. Some possible answers include the following: Do you receive more email during the week or on the weekends? What is the typical length of a non-spam email message? What percentage of your email messages are spam? Do messages from female friends tend to be longer than messages from male friends? Which type of senders is most likely to use emoticons in their messages?
5. No, this is not a legitimate variable because it does not vary from message to message. This statement describes a subset of people, not a measurement you would make on each individual message. As we saw above, *whether the message contains an emoticon* it would be a legitimate variable.

Sample Quiz 1B

In a study reported in the July 6, 2007, issue of the journal *Science*, researchers studied 396 American college students and kept track of each student's gender and also how many words they spoke in a day. They found that women spoke an average of 16,215 words per day and men an average of 15,669 words per day.

1. Identify the observational units in this study.
2. Identify the categorical variable described in this paragraph. (Be sure to state it as a variable.)
3. Identify the quantitative variable described in this paragraph. (Be sure to state it as a variable.)
4. Consider a new variable: whether the student spoke at least 10,000 words that day. Is this a legitimate variable to record in this study? Explain why or why not.
5. Specify another variable that could have been recorded about the observational units in this study.

Solution to Sample Quiz 1B

1. The observational units are the 396 American college students.
2. The categorical variable is the *gender of each student* (male or female).
3. The quantitative variable is *how many words each student spoke in a day*.
4. Yes, this is a legitimate binary categorical variable because the answer to this question varies from student to student.
5. Many answers are possible, such as *proportion of sentences in a day that are questions*, *number of phone calls made in a day*, and *number of snacks per day*. Be sure the answers are stated as variables.

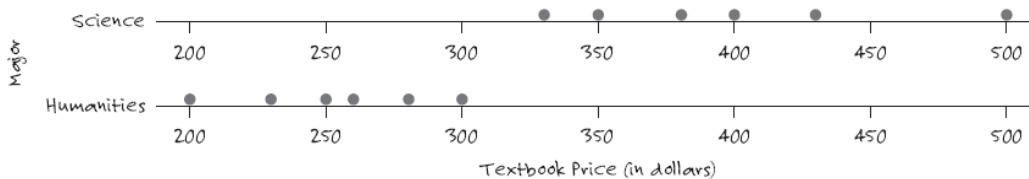
Sample Quiz 2A

You want to compare prices of textbooks, so you ask six friends who are science majors and six friends who are humanities majors to report how much they spent on textbooks this term.

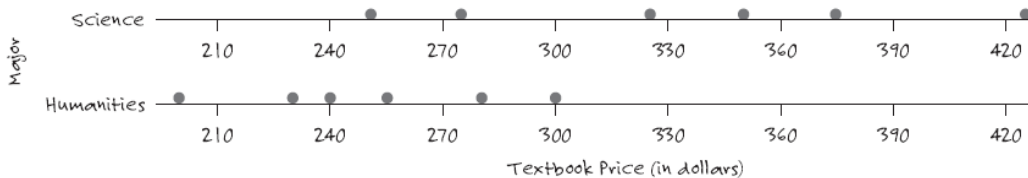
1. Which would be appropriate for comparing responses of science and humanities majors—a dotplot or a bar graph? Explain why.
2. Sketch what this graph would look like if all science majors spent more than all humanities majors on textbooks.
3. Sketch what this graph would look like if it's not the case that all science majors spent more than all humanities majors, but there is a tendency for science majors to spend more than humanities majors on textbooks.
4. Sketch what this graph would look like if the two groups spend similar amounts on textbooks on average, but the amounts show much less consistency with humanities majors.
5. What is the variable represented on the horizontal axis of these graphs? Be sure to label the horizontal axis (but you do not have to include a scale).

Solution to Sample Quiz 2A

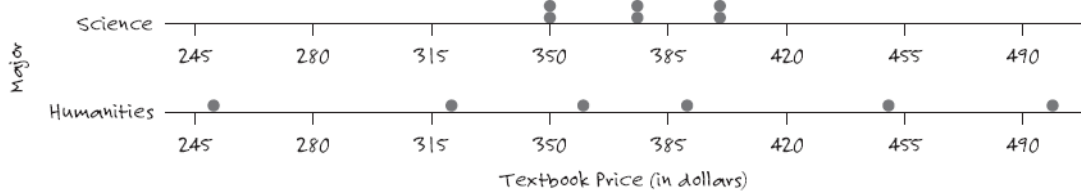
1. A dotplot would be more appropriate than a bar graph in this situation because the given data (textbook prices) is quantitative, not categorical.
2. All of the textbook prices for science majors are greater than all of the prices for humanities majors:



3. Now most, but not necessarily all, of the textbook prices for the science majors are higher than most of the prices paid by the humanities majors:



4. The centers of the two sets of values are similar, around \$380 in the sketch below, but the prices for the science majors tend to fall close to that value (between \$350 and \$400 in the sketch below), whereas the prices for the humanities majors are more spread out.



5. The textbook prices would appear on the horizontal axis.

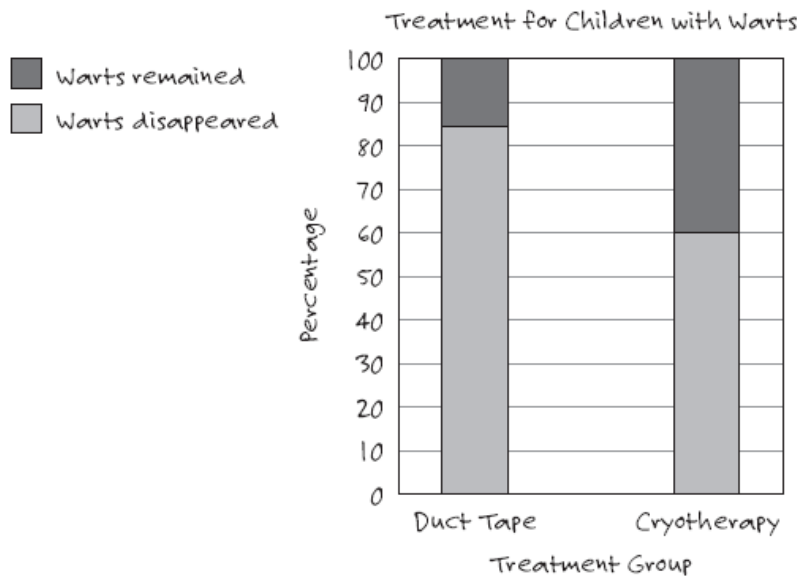
Sample Quiz 2B

In a study reported in the *Archives of Pediatric and Adolescent Medicine* in October 2002 on treating warts, researchers investigated whether liquid nitrogen cryotherapy (“burning it off”) or common duct tape would be a more effective treatment for kids with warts. The researchers found that 22 of 26 patients treated with duct tape saw complete disappearance of their warts, compared to 15 of 25 patients in the cryotherapy group.

1. and 2. For each group, calculate the proportion of patients whose warts disappeared completely.
3. Which would be an appropriate graph for comparing responses of these two groups—a dotplot or a bar graph? Explain why.
4. Draw the appropriate graph to compare the responses of these two groups. Be sure to label the horizontal axis.
5. Comment on what the graph reveals about the comparative effectiveness of these two treatments.

Solution to Sample Quiz 2B

1. and 2. Duct tape group proportion: $.846$; cryotherapy group proportion: $.600$
3. A bar graph would be appropriate for comparing the responses of these two groups because you are comparing the proportions in two categories—you are not comparing quantitative responses.
4. Here is the graph:



5. The bar graph reveals that the warts disappeared more often with the duct tape than with the cryotherapy.

Sample Quiz 3A

You want to investigate whether teenagers in England tend to read more *Harry Potter* books than teenagers in the United States.

1. Identify the populations in this study.
2. Identify the explanatory variable, and classify it as categorical or quantitative.
3. Identify the response variable, and classify it as categorical or quantitative.

If you read a report that Hospital A has a higher mortality (death) rate than Hospital B when treating heart attack patients, it's possible that the severity of the patient's condition is a confounding variable.

4 and 5. Describe what it means for patient's condition to be a confounding variable in this context. Be sure to indicate how this potential confounding variable could be related both to the explanatory and the response variable.

Solution to Sample Quiz 3A

1. The populations are teenagers in England (1) and teenagers in the United States (2).
2. The explanatory variable is *whether the teenager is from England or the United States*. This is a binary categorical variable.
3. The response variable is the *number of Harry Potter books the teenager has read*. This is a quantitative variable.
- 4 and 5. A confounding variable is an undefined/unrecorded variable whose effects on the response variable are indistinguishable from the explanatory variable. It is possible that most of the patients who go to Hospital A are in critical condition when they arrive, whereas most of the patients who go to Hospital B are in fair to good condition when they arrive. This would necessarily mean that more of Hospital A's heart attack patients would die (because of their prior condition, not because of their treatment), and more of Hospital B's patients would be likely to survive.

Sample Quiz 3B

A university wants to know the average yearly salary of its alumni ten years after graduation. It has a list of all alumni who graduated ten years ago and writes to each one, asking for information about annual salary. Suppose that 40% of the alumni respond to this invitation.

1. Describe (in words) the parameter of interest.
2. Describe (in words) the statistic of interest.
3. Would you consider the sample to be representative of the population, or is this sampling method biased? Explain.

A national survey of 12- to 17-year-olds conducted in 2011 found that teens who spend time on a social networking site in a typical day are three times more likely to use alcohol than teens who do not spend time on a social networking site in a typical day. Headlines proclaimed that social networking causes drinking. A blogger responded that this conclusion is not justified and that age is a confounding variable.

4 and 5. Describe what it means for age to be a confounding variable in this context. Be sure to indicate how this potential confounding variable could be related both to the explanatory and the response variables.

Solution to Sample Quiz 3B

1. The parameter is the mean (average) salary of all University alumni ten years after they graduated.

2. The statistic is the average salary of the 40% of the alumni who responded to the invitation to provide information about their annual salary.
3. This sampling method is definitely biased as the sample was self-selected. Only the alumni who are willing to report their salary responded to the survey. Those who wish to keep their salary information private (60% of them!) did not respond. It is likely that this sampling method will overestimate the average salary of the population.
- 4 and 5. A confounding variable is one whose effects on the response variable are indistinguishable from the explanatory variable. It seems plausible that older teens in this 12-17 age group are more likely to use social networking and also more likely to use alcohol. Age might therefore explain the connection between social networking and drinking, rather than a cause-and-effect relationship.

Sample Quiz 4A

An organization called The Knot Inc. hosts two popular wedding websites and conducted a national (U.S.) survey of nearly 19,000 couples who were married in the year 2010. The organization reported that the average amount spent on a wedding, excluding honeymoon, was \$26,984 and that 43% of the ceremonies were held outdoors.

1. Identify the population of interest in this survey.
2. Identify the sample and the sample size.
3. Are the values listed (\$26,984, 43%) parameters or statistics? Explain.
4. Identify (in words) the parameters of interest in this study.
5. The press release describing this survey did not say how the 19,000 couples were selected. Explain why knowing this missing information is important.

Solution to Sample Quiz 4A

1. The population is all couples who were married in the U.S. in the year 2010.
2. The sample consists of the nearly 19,000 couples who responded to the survey. The sample size is nearly 19,000.
3. These values are statistics because they describe a sample.
4. The parameters are the average amount spent on all weddings in the U.S. in 2010 and the proportion of all couples married in the U.S. in 2010 who held the ceremony outdoors.
5. In order to consider the sample to be representative of the population, or to know how broadly the results of this survey can be generalized, you need to know whether the sample was randomly selected or how it was selected.

Sample Quiz 4B

Suppose you want to estimate the average waiting time at the coffee bar on campus. You decide to choose five days of the semester at random and then visit the coffee bar at four randomly chosen times on those days. You will record the waiting time for the customers who you find in line at those times and then calculate the average of these times.

1. Identify the population in this study.
2. Identify the sample in this study.
3. Is the number that you are trying to estimate a parameter or a statistic? Explain.
4. Is the average that you calculate a parameter or a statistic? Explain.
5. Even though your sampling process involves multiple stages of randomness, it is still biased. Explain why and in which direction.

Solution to Sample Quiz 4B

1. The population is all visits to the coffee bar on your campus this semester
2. The sample is the customers in line at the coffee bar on the days/times that you select.
3. The number you are trying to estimate is a parameter because it describes a population.
4. The average of the waiting times that you calculate is a statistic because it is calculated from a sample.
5. This sampling method is still biased because customers with longer waiting times are more likely to be in line when you show up. There may be quite a few patients who are in and out quickly, but it will be harder to include them in your sample using this method. This sampling method will overrepresent customers with longer waiting times and overestimate the average waiting time.

Sample Quiz 5A

In a study published in the July 4, 2007, issue of the *Journal of the American Medical Association*, researchers investigated whether small doses of dark chocolate can reduce blood pressure for people who suffer from mild cases of high blood pressure. They recruited 44 German adults who were otherwise healthy except for mild cases of high blood pressure. These subjects were randomly assigned to either a dark chocolate group or a white chocolate group, and all subjects were instructed to eat one square portion of a chocolate bar (containing about 30 calories) every day for 18 weeks. They were also instructed not to eat any other cocoa products. Each subject had his/her blood pressure recorded at the beginning and end of the study, with the reduction in blood pressure calculated. It turned out that those in the dark chocolate group had an average reduction of about 3 points in systolic blood pressure, compared to a 0 point reduction on average in the white chocolate group.

1. Identify the explanatory variable in this study, and classify it as categorical or quantitative.
2. Identify the response variable in this study, and classify it as categorical or quantitative.
3. Is this an experiment or an observational study? Explain how you know.
4. Does the design of the study (the way the data were collected) allow for concluding that eating dark chocolate causes a reduction in blood pressure? Explain briefly.
5. Does the design of the study (the way the data were collected) allow for generalizing the results to the population of all people who suffer from a mild case of high blood pressure? Explain briefly.

Solution to Sample Quiz 5A

1. The explanatory variable is the *type of chocolate bar eaten by the subjects each day*. This is a binary categorical variable.
2. The response variable is the *reduction in blood pressure* for each subject. This is a quantitative variable.
3. This is an experiment because the researcher randomly assigned the subjects to the treatment groups (type of chocolate).
4. Yes, because this study is a well-designed experiment, you can conclude that eating dark chocolate causes more of a reduction in blood pressure than eating white chocolate in German adults with mild cases of high blood pressure.
5. No, you should not generalize these results beyond German adults with mild high blood pressure. These subjects were not randomly selected from the group of all people who suffer from all levels of high blood pressure.

Sample Quiz 5B

Classify each of the following statements as true or false:

1. Random assignment guarantees that all variables will be perfectly balanced out between the treatment groups.
2. Random assignment is not applicable for experiments with several treatment groups to be compared.
3. Random assignment tends to balance out variables that a researcher might not think about in advance, as well as variables that she does think about in advance.
4. When subjects are randomly assigned in an experiment that compares a new treatment to a standard treatment, the subjects receiving the new treatment are guaranteed to perform better than subjects receiving the standard treatment.
5. Double-blind experiments are only necessary when the experimenters cannot be trusted to act ethically.

Solution to Sample Quiz 5B

1. False (not a guarantee of perfect balance)
2. False (can randomly assign to more than two groups)
3. True
4. False
5. False (there are other hidden sources of bias that blinding cautions against)

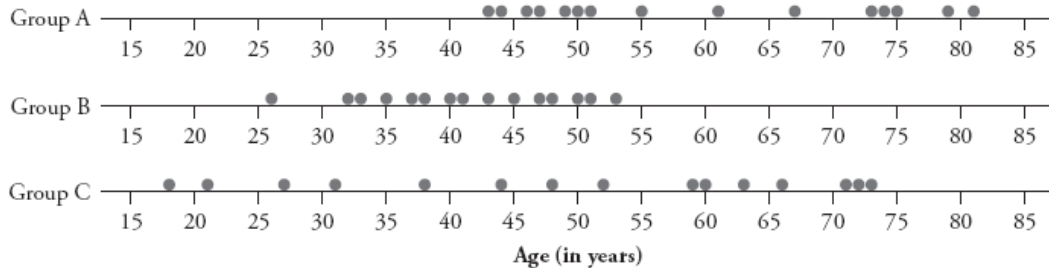
Sample Exam 1A

1. Suppose that the observational units in a study are the 23 campuses in the California State University system (e.g., Cal Poly, Long Beach State, Fresno State, Cal State Northridge, . . .).
 - a. State a quantitative variable that you could record on these observational units.
 - b. State a categorical variable that you could record on these observational units.
2. In the August 12, 2007, issue of *Parade* magazine (which comes with the Sunday newspaper for millions of Americans), readers were asked to go online and vote on the question: Should the drinking age be lowered? The results were published in the October 7 issue: More than 14,000 readers voted, and 48% said “yes.”
 - a. Is this number (48%) a parameter or a statistic? Explain (in one sentence or less) how you know.
 - b. Do you trust this sample to be representative of the population of all American adults? Explain.
 - c. How would you respond to someone who says, “Even if this had been a random sample, there’s no way that a sample of 14,000 people could be representative of an entire country of 300 million people.”
3. Another article in the October 7, 2007, issue of *Parade* magazine claimed that one-third of all homicides in the United States remain unsolved.
 - a. Is this number (one-third) a parameter or a statistic? (No explanation is needed.)
 - b. What are the observational units?
 - c. If a researcher studies a random sample of 150 homicides from around the United States, will he/she necessarily find that one-third of them remain unsolved? Explain briefly.
4. In a recent study, researchers followed 104,000 U.S. veterans who had served in the armed forces and a comparison group of 216,000 nonveterans. Over a period of 12 years, they found that 197 veterans and 311 nonveterans committed suicide.
 - a. Identify the explanatory and response variables in this study.
Explanatory:
Response:
 - b. Is this an observational study or an experiment? Explain briefly.
 - c. Calculate the proportion who committed suicide in the veterans group. Then do the same for the nonveterans group.

Veterans group:
Nonveterans group:

- d. The study also found that overweight people were much less likely to commit suicide than underweight people. Would you conclude that weight gain causes a lower risk of suicide? Explain briefly.
- e. Following the point about overweight people being less likely to commit suicide, the researchers said that smoking may be a confounding variable, however. Explain what this statement means in the context of this issue.

5. Consider the following dotplots of (hypothetical) ages for three groups of people:



- a. Which group tends to have the *oldest* ages? (No explanation or calculation is needed.)
 - b. Which group tends to have the *youngest* ages? (No explanation or calculation is needed.)
 - c. Which group has the *most consistency* in ages? (No explanation or calculation is needed.)
 - d. Which group has the *least consistency* in ages? (No explanation or calculation is needed.)
6. Suppose an instructor wants to investigate whether statistics students who are taught using an online format learn just as much as students taught using a face-to-face format.
- a. Identify the explanatory variable in this study.
 - b. Suggest a reasonable response variable for this study.
 - c. Suppose students are given the option of signing up for their choice of the online or face-to-face format class. Then, if the online students perform significantly better than the face-to-face students, could the instructor reasonably conclude that the online format has beneficial effects? Explain the reasoning behind your answer.
7. An April 9, 2002, news release from the National Institutes of Health describes a study that investigated whether the herb St. John’s wort is effective for treating depression. An excerpt from this press release follows:
- An extract of the herb St. John’s wort was no more effective for treating major depression of moderate severity than placebo, according to research published in the April 10 issue of the *Journal of the American Medical Association*. The randomized, double-blind trial compared the use of a standardized extract of St. John’s wort (*Hypericum perforatum*) to a placebo for treating major depression of moderate severity. The multi-site trial, involving 340 participants, also compared the FDA-approved antidepressant drug sertraline to placebo as a way to measure how sensitive the trial was to detecting antidepressant effects.
- a. Is this an experiment or an observational study? (Do not bother to explain.)
 - b. Explain what it means for this study to be “double-blind” and also why this is an important component of the study design.

Solution to Sample Exam 1A

1. a. Examples include *number of undergraduates attending the campus, number of miles from San Luis Obispo, and number of majors offered.*

b. Examples include *whether there are more males or females enrolled, whether the campus is within 50 miles of the ocean, and whether the campus offers a major in journalism.*

2. a. This is a statistic because it refers to the sample of 14,000 people who voted.

b. This sample is not necessarily representative of the population. Only people who read *Parade* magazine saw the poll, and only people with Internet access could participate. Perhaps most importantly, people with a strong feeling about the drinking age issue are more likely to participate than people with less strong feelings.

c. Surprisingly enough, the population size does not really matter. A *random* sample of 14,000 people does a good job of representing the population from which it is selected. Because everyone in the population has the same chance of being selected for the sample, that sample is virtually guaranteed to have all sorts of people who will (taken as a whole) adequately represent the population. In fact, with such a large sample size, there will be very little variability (i.e., high precision) in sample results from sample to sample.

3. a. This number is a parameter because it describes the population of all homicides in the United States.

b. The observational units are all homicides in the United States.

c. The researcher will not necessarily find that one-third of the homicides in his/her sample remain unsolved. Results from individual samples vary from sample to sample. This phenomenon is known as sampling variability. The sample proportion of unsolved cases should be fairly close to one-third, but it would vary from sample to sample.

4. a. Explanatory: whether the person is a veteran

Response: whether the person committed suicide in this time period

b. This is an observational study. Nobody was assigned to be a veteran or not.

c. Veterans group: $197/104,000 \approx .00189$

Nonveterans group: $311/216,000 \approx .00144$

d. You should not necessarily conclude that weight gain causes a lower risk of suicide. This is an observational study, so you cannot conclude that gaining weight lowers the risk of suicide. There could be confounding variables (such as smoking status, mentioned in the next question) that could explain the relationship between weight and suicide. Another potential confounding variable is depression: Perhaps those suffering from depression are prone to lose weight and also to commit suicide.

e. If smokers tend to be underweight, then you have no way of knowing whether being underweight causes a greater risk of suicide or smoking causes a greater risk of suicide. Similarly, if smokers tend to be overweight, then you have no way of knowing whether being overweight causes a lower risk of suicide or smoking causes a lower risk of suicide.

5. a. Group A

b. Group B

c. Group B

d. Group C

6. a. The explanatory variable is the *format of the instruction* (online or face-to-face).

b. Reasonable response variables include the *student's score on the final exam* or *overall score in the course or course grade.*

c. No, the instructor could not reasonably conclude that the online format has beneficial effects. This is an observational study, so no cause-and-effect conclusion can be drawn. Because students choose which format class to enroll in, perhaps students who have stronger skills with mathematics and technology were drawn to the online format more than the face-to-face format; in that case, their math and technology skills may account for their better performance rather than the online format.

7. a. This is an experiment because the subjects were assigned (randomly) to take either St. John's wort or the placebo.

b. Double-blindness means that neither the subjects nor the health professionals evaluating them were aware of which subjects received which treatment.

This blindness is important for the subjects because they would probably react differently if they knew they were receiving the placebo. In fact, that knowledge would defeat the purpose of the placebo. The blindness is also important for evaluators who might otherwise be influenced (perhaps subconsciously) in making their assessments of a subject's depression level by knowing which treatment the subject received.

Sample Exam Unit 1B

1. In a study reported in the September 24, 2007, issue of the *Archives of Internal Medicine*, German researchers described a study conducted on 1162 German adults suffering from chronic low-back pain. These subjects were randomly assigned to one of three groups: real acupuncture, sham acupuncture, and conventional therapy. Researchers found that 47% of subjects in the real acupuncture group improved, compared to 44% in the sham acupuncture group and 27% in the conventional therapy group.

a. Identify the observational units in this study.

b. Identify the explanatory variable. Also classify it as categorical or quantitative.

If it is categorical, indicate whether it is binary.

c. Identify the response variable.

d. Is this an observational study or an experiment? Explain briefly.

e. Did this study make use of random assignment or random sampling, or both, or neither? Explain briefly.

f. Construct an appropriate graph to display the results.

g. Comment on what the graph reveals.

h. If the researchers find that the difference in improvement percentages between the real acupuncture group and the conventional therapy group is significant, would it be appropriate to conclude that real acupuncture causes a higher improvement rate than conventional therapy? Explain.

2. Suppose the observational units in a study are customers arriving at a post office.

For each of the following, identify whether it is a variable that can be recorded on these observational units. (No explanations are required; simply answer "yes" or "no.")

a. Gender

b. Total time spent waiting in line and being served

c. Number of customers who arrive before noon

d. Total amount of money spent

e. Whether men or women spend more money on average

3. On June 4–24, 2007, the Gallup Poll asked a nationwide sample of adult Americans about their attitude toward interracial marriage. Of the 2388 adults interviewed, 77% said that they approve of marriage between whites and blacks.

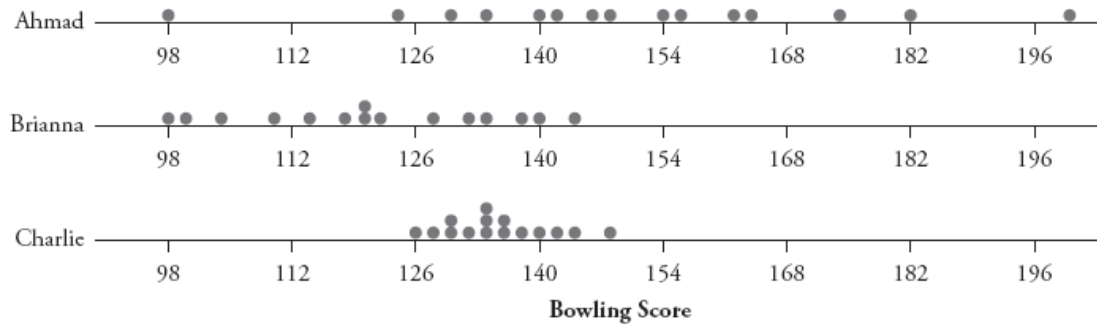
a. Is this number (77%) a parameter or a statistic? Explain briefly.

b. What kind of graph would be appropriate for displaying the results of this survey—a dotplot or a bar graph? Explain briefly. (Do not create the graph.)

c. Identify the sample size in this survey.

d. How would you respond to a person who argued that this sample cannot possibly be representative of the population of all American adults, because there are more than 200 million American adults but fewer than 3000 in this sample?

4. Consider the following dotplots of bowling scores for 15 games by three different bowlers:



- Which bowler tends to have the highest scores? (Do not provide explanations or calculations.)
- Which bowler tends to have the lowest scores? (Do not provide explanations or calculations.)
- Which bowler has the most consistency in his or her scores? (Do not provide explanations or calculations.)
- Which bowler has the least consistency in his or her scores? (Do not provide explanations or calculations.)

5. Studies conducted at elementary schools have shown that children with longer feet tend to score higher on reading tests than children with shorter feet.

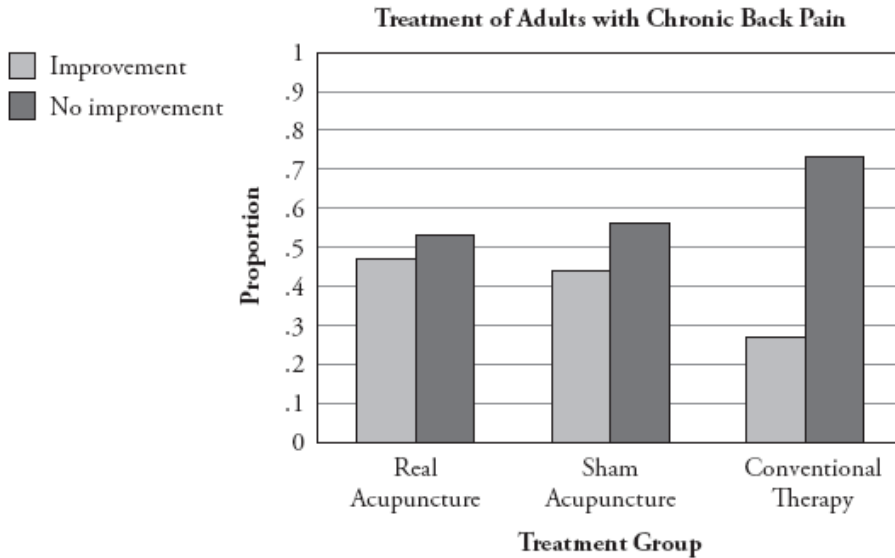
- Are these studies observational or experimental? Explain briefly.
- Suggest a potential confounding variable that could explain the observed phenomenon that children with longer feet tend to score higher on reading tests than children with shorter feet. Describe what makes this a confounding variable.

6. a. Does taking a larger sample help to reduce the bias of a sampling method? Explain.

b. Does taking a larger sample help to reduce the sampling variability of a sampling method? Explain.

Solution to Sample Exam Unit 1B

- The observational units are the 1162 German adults suffering from chronic low-back pain.
 - The explanatory variable is the *treatment group to which the patients were assigned*. It is categorical but not binary because there are three groups (real acupuncture, sham acupuncture, and conventional therapy).
 - The response variable is *whether the patient improves*.
 - This is an experiment because the patients were assigned (randomly) to a treatment group.
 - This study makes use of random assignment, but probably not random sampling. You are not told that the patients were chosen randomly from the population of all German adults suffering from chronic low-back pain.
 - A bar graph follows:



g. The graph reveals that the improvement proportions are quite similar between the real and sham acupuncture groups. However, the improvement proportion appears to be substantially smaller for those who received conventional therapy. With none of these three procedures do more than half of the patients improve, but the improvement proportions are close to one-half in both acupuncture groups.

h. Yes, because this was a randomized experiment, it is appropriate to conclude that acupuncture causes a greater proportion of patients to improve than conventional therapy.

2. a. Yes **b.** Yes **c.** No **d.** Yes **e.** No

3. a. The number 77% is a statistic because it is calculated from the sample of adults interviewed by Gallup, not from the entire population of American adults.

b. A bar graph would be appropriate because the variable *attitude toward interracial marriage* is categorical, not quantitative.

c. The sample size is 2388, the number of adults interviewed.

d. This argument is incorrect. As long as the sample was selected randomly, 2388 people is a large enough sample to be fairly representative of any population.

The population size is not relevant as long as the sample was selected randomly.

4. a. Ahmad **b.** Brianna **c.** Charlie **d.** Ahmad









5. a. These studies are observational. A child cannot be assigned to have large or small feet; he/she can only be observed.

b. Age or grade in school is a plausible confounding variable. Older children tend to have larger feet and also tend to be better readers, which would account for the observation that children with larger feet tend to be better readers.

6. a. Taking a larger sample does not reduce bias. A good example of this is the *Literary Digest* poll, which had a huge sample size but used an extremely biased sampling method.

b. Taking a larger sample size does reduce sampling variability. With a larger sample, sample results are more consistent and vary less from sample to sample.

List of available files:

 additionaltopics	2016-07-08 4:22 PM	Rich Text Format	163 KB
 unit1	2016-07-08 4:21 PM	Rich Text Format	5,982 KB
 unit2	2016-07-08 4:23 PM	Rich Text Format	19,261 KB
 unit3	2016-07-08 4:23 PM	Rich Text Format	13,418 KB
 unit4	2016-07-08 4:22 PM	Rich Text Format	4,356 KB
 unit5	2016-07-08 4:22 PM	Rich Text Format	503 KB
 unit6	2016-07-08 4:22 PM	Rich Text Format	3,130 KB
 unit7	2016-07-08 4:23 PM	Rich Text Format	18,905 KB