

Quiz Chapter 4

	1	2	3	4	5	6	7	8	9	10
a										
b										
c										
d										
e										

something that
has nothing to do with
sampling

1. Which of the following is a source of nonsampling error in a sample survey?

- ☒ a. Voluntary response sampling
- ? ☐ b. Using voter registration lists as the sampling frame MAYBE
- ☒ c. Variation due to chance in choosing a sample at random YES OR MAYBE NO
- ☒ d. Using 95% confidence NO
- ☒ e. None of the above ← BEST

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2. A recently conducted poll omitted people without telephones, and it also left out Alaska and Hawaii residents to reduce cost. These omissions may cause a small bias. If so, that bias is

- ☒ a. a sampling error.
- ☐ b. a nonsampling error.
- ☐ c. due to voluntary response.
- ☐ d. due to absence of a control group.

3. Which of the following is NOT a potential problem with Internet surveys?

- ☒ a. Voluntary response *problem*
- ☒ b. Multimedia content ? *← this is the only left*
- ☐ c. Undercoverage *problem*
- ☐ d. Nonresponse *problem*

4. Which of the following sources of error is included in the margin of error? *± MOE*

- ☒ a. Chance variation in choosing a random sample
- ☐ b. Errors in entering the data into the computer
- ☐ c. Some of the subjects did not understand the questions
- ☐ d. Voluntary response
- ☐ e. All of the above

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Professor Lilli Gans wishes to study the relationship between a person's zodiac sign and his or her political opinions. She obtains the birthdays of all 816 students enrolled in her Astrology 101 course. Then she uses a random digits table to choose 10 students from each of the 12 zodiac signs. For example, students born from March 21 until April 19 have the Aries zodiac sign, and Professor Gans chooses 10 Aries students at random. She uses a different part of the table of random digits to choose students having each sign. After obtaining her sample, Professor Gans has the selected students fill out a questionnaire.

5. One of the questions in Professor Gans's questionnaire asks whether the student has ever given money to the American Nazi Party. Any students who have done so are likely to lie and say "No," rather than admit the truth. This is an example of

- a. confounding.
- b. anecdotal evidence.
- c. sampling error.
- d. nonsampling error.

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A sportswriter wants to know how strongly residents support building a new stadium downtown for the local major league soccer team. **She prints a survey in her column and asks her readers to send in their response.** One thousand readers sent in their response.

6. Critics of the poll argue that the poll only sampled readers of her column and not all residents of the city. This is an example of

- ✗ a. nonresponse.
- ? ✗ b. response bias.
- ✓ (c) undercoverage. ← BEST
- ? ✗ d. random sampling error.

7. Some common sources of nonsampling error in samples of human populations are

- ✓ a. using voluntary response samples; some subjects lie.
- ✓ (b) that some subjects lie; some subjects can't be contacted. BEST
- ✗ c. that some subjects can't be contacted; drawing a sample from names in a telephone directory.
- ✗ d. Both B and C are correct.
- ✓ e. Answers A, B, and C are correct.

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8. When a sample survey asks people about their age or some physical characteristic, such as weight, some people who feel self-conscious may not give accurate responses.

- a. This is a sampling^{NO} error that causes bias.
- b. This is a sampling^{NO} error that increases variability.
- c. This is a nonsampling error that causes bias.
- d. This is a nonsampling error that increases^{NO} variability.

9. When a sample survey asks people about use of illegal drugs, some people who use drugs will lie and say they do not use drugs because they fear that the information will be given to the police or employers.

- a. This is a sampling^X error that causes bias.[✓]
- b. This is a sampling^X error that increases^X variability.
- c. This is a nonsampling error that causes^{YES} bias.
- d. This is a nonsampling error that increases^X variability.

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10. Professional sample surveys use careful random samples, usually by randomly dialing telephone numbers, to come close to an SRS. But the results that a sample survey actually obtains may be strongly biased because

- X a. the typical sample size of 1000 or 1500 people is too small.
- X b. the margin of error is too large.
- X c. surveys report only what their sponsors want to hear.
- (d. many people refuse to respond to telephone surveys.

A
BEST

Name: _____ Class: _____ Date: _____

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Answer Key

1. e

2. a

3. b

4. a

5. d

6. c

7. b

8. c

9. c

10. d