

Quiz 1

1. Airlines count and record the number of passengers on each flight they operate. This set of values is an example of: (select all that apply)
A. continuous data B. discrete data C. qualitative data D. ratio level data E. quantitative data
2. If data consists of numerical measurements that fall along a continuous scale without gaps or spaces between any two achievable values, then such data is an example of:
A. continuous data B. discrete data C. qualitative data D. categorical data E. ratio data
3. Engineers count and record the number of cars that run a red light at the intersection of 8th and 107th streets in Miami over the course of three days of observations. This data set contains:
A. continuous data B. discrete data C. qualitative data D. categorical data E. nominal data
4. Derived from the **full set** of measurements in a population, a _____ is a numerical measure which summarizes some attribute of that population.
A. Statistic B. Variable C. Parameter D. sample average E. Experimental unit
5. Airlines weigh and record the weight of each piece of checked luggage that flies on their aircraft. This set of values is an example of: (select all that apply)
A. continuous data B. discrete data C. qualitative data D. nominal data E. quantitative data
6. A sample of 35 women had an average height of 64.1 inches. The average (64.1 inches) is an example of:
A. Statistic B. Variable C. Parameter D. sample proportion E. Population mean
7. An online retailer reviewed all of its sales and found that the average checkout total was \$54.13. The average (\$54.13) is an example of:
A. Statistic B. Variable C. Parameter D. sample proportion E. sample mean
8. On the day of the final last year, I asked every third person who entered the classroom how many hours he/she studied for the exam. The median response was 8.5 hours. The 8.5 hours is an example of:
A. Statistic B. Survey C. Parameter D. sample proportion E. Inferential statement

9. Only 4% of students who applied to Harvard were admitted. The 4% is an example of:
- A. Statistic B. Survey C. Parameter D. sample proportion E. Inferential statement
10. The university collects students' overall ratings of professors. The ratings fall on a scale that range from excellent to poor. This set of ratings is an example of: (select all that apply)
- A. continuous data B. discrete data C. qualitative data D. ratio data E. quantitative data
11. In which following examples would it be best to use a sample of data instead of the full set of population data? (note: select all that apply)
- A. To ensure that cell phones are being manufactured reliably, a quality control manager will conduct a 30 minute test on the phones that will simulate four years of wear and tear on the device. Any phone that is tested will no longer be able to be sold.
- B. A drug manufacturer wants to know if a new pain medication is safe. It plans to give the drug to human subjects for six weeks to determine if it is indeed safe.
- C. A gambling house in the UK would like to use a computer model to predict the outcome of upcoming NBA games. The computer model uses data from previous games to predict the outcome of a particular matchup; however, each past game has so much data, the computer takes about 12 hours to fully analyze each inputted game. The population of useable games for this analysis is typically over 500 games.
- D. A sports journalist wants to compare the salaries (in real dollars) for NFL quarterbacks today with those from 2014.
12. Researchers measure and record the waist circumference in inches of 125 men. This set of ratings is an example of: (select all that apply)
- A. continuous data B. discrete data C. qualitative data D. ratio data E. quantitative data
13. The FIU tabulates students' GPAs. This set of GPAs is an example of: (select all that apply)
- A. continuous data B. discrete data C. qualitative data D. ordinal data E. quantitative data
14. I am interested in the rate of car ownership among my students this semester. I surveyed all of my students and discovered that 97% of them own a car. The number 97% is an example of:
- A. Statistic B. Variable C. Parameter D. sample proportion E. Inferential statement

15. Costco records the number of items purchased on each customer receipt. This set of values is an example of: (select all that apply)

A. continuous data B. discrete data C. qualitative data D. nominal data E. quantitative data

16. Derived from a **subset** of measurements in a population, a _____ is a numerical measure which summarizes some attribute of the selected set of data.

A. Statistic B. Variable C. Parameter D. sample proportion E. Experimental unit

17. A statistician in a mail order house wished to estimate how many mail order parcels prepared last Friday by the wrapping and packaging department were improperly packaged. He took a random sample of 3% of all the parcels prepared that day, had the sample parcels unwrapped and inspected, and found that 48 were improperly packaged. He reported that 1600 mail order parcels were improperly packaged on Friday. The statistician's report utilized:

A) sample statistic B) population parameter. C) designed experiment D) random sample

18. A published report recently stated "Based on a sample of 150 new cars, there is evidence to indicate that the average new car price of all foreign automobiles is significantly higher than the average new car price of all American cars." This statement is an example of a(n) _____.

A) a statistical inference. B) a population parameter C) descriptive statistic D) survey

19. A personnel director at a large company studied the eating habits of the company's employees. The director noted whether an employee brought their own lunch to work, ate at the company cafeteria, or went out to eat lunch. The goal of the study was to improve the company cafeteria. This type of data collection would best be considered as a(n) _____.

A) a designed experiment B) random sample C) survey sample D) observational study

20. A sample of high school teenagers reported that 92% of those sampled are interested in pursuing a college education. This statement is a result of a _____.

A) designed experiment B) quantitative variable C) statistical inference D) descriptive statistic