

Unit 1 – Day 3 Homework
Sampling and Types of Data

Identify the Sampling Technique used in each of the following as Stratified, Systematic, Cluster, Random or Convenience.

1. A group of people are classified according to age and then random samples of people from each group are taken.
2. Every 15th iPhone coming off an assembly line is checked for defects.
3. A state is divided into regions using zip codes. A random sample of 20 zip code areas is selected.
4. A door prize is given away at a teachers' convention. Tickets are placed in a bin and the tickets are mixed up. Then a ticket is selected by a blindfolded person.
5. Every 17th person in a line to buy ticket to see Star Wars is asked his or her age.
6. The business in Cary are grouped according to type: medical, service, retail, manufacturing, financial, construction, restaurant, hotel, tourism, and other. A random sample of 10 businesses from each type is selected.
7. The first 25 students leave the cafeteria are asked how much money that spent on shoes for the semester.
8. The Food and Drug administration randomly selects five stores from each of four randomly selected sections of a large city and checks food items for freshness. These stores are used a representative sample of the entire city.
9. Bingo balls in a bin are shaken and then balls are selected from the bin.
10. The Students Senate at North Carolina State University is electing a new president. The first 25 people leaving the library are asked for whom they will vote.

Determine if the variables listed below are *quantitative* or *categorical*. Neatly print "Q" for quantitative and "C" for categorical.

_____ 1. Time it takes to get to school

_____ 8. Height

_____ 2. Number of shoes owned

_____ 9. Amount of oil spilled

_____ 3. Hair color

_____ 10. Age of Oscar winners

_____ 4. Temperature of a cup of coffee

_____ 11. Type of pain medication

_____ 5. Teacher salaries

_____ 12. Jellybean flavors

_____ 6. Gender

_____ 13. Country of origin

_____ 7. Facebook user

_____ 14. Type of meat

Answers

1. Stratified
2. Systematic
3. Cluster
4. Random
5. Systematic
6. Stratified
7. Convenience
8. Cluster
9. Random
10. Convenience
11. Q
12. Q
13. C
14. Q
15. Q
16. C
17. C
18. Q
19. Q
20. Q
21. C
22. C
23. C
24. C