Determine whether the given value is a statistic or a parameter.

1) A sample of 120 employees of a company is selected, and the average age is found to be 37 years.
   A) Parameter
   B) Statistic
   Answer: B

2) After taking the first exam, 15 of the students dropped the class.
   A) Statistic
   B) Parameter
   Answer: B

3) After inspecting all of 55,000 kg of meat stored at the Wurst Sausage Company, it was found that 45,000 kg of the meat was spoiled.
   A) Statistic
   B) Parameter
   Answer: B

Determine whether the given value is from a discrete or continuous data set.

4) The number of freshmen entering college in a certain year is 621.
   A) Discrete
   B) Continuous
   Answer: A

5) The temperature of a cup of coffee is 67.3°F.
   A) Continuous
   B) Discrete
   Answer: A

6) The weight of Bill's pack as he sets off on a backpacking trip is 48.3 lb.
   A) Continuous
   B) Discrete
   Answer: A

Determine which of the four levels of measurement (nominal, ordinal, interval, ratio) is most appropriate.

7) The temperatures of eight different plastic spheres.
   A) Ratio
   B) Nominal
   C) Interval
   D) Ordinal
   Answer: C

8) The sample of spheres categorized from softest to hardest.
   A) Interval
   B) Ordinal
   C) Ratio
   D) Nominal
   Answer: B

9) Salaries of college professors.
   A) Ratio
   B) Ordinal
   C) Nominal
   D) Interval
   Answer: A

10) Survey responses of "good, better, best".
    A) Interval
    B) Ratio
    C) Nominal
    D) Ordinal
    Answer: D
11) Temperatures of the ocean at various depths.
   A) Ratio B) Nominal C) Ordinal D) Interval
   Answer: D

12) Nationalities of survey respondents.
   A) Nominal B) Ordinal C) Interval D) Ratio
   Answer: A

13) Ages of survey respondents.
   A) Interval B) Ratio C) Nominal D) Ordinal
   Answer: B

Identify which of these types of sampling is used: random, stratified, systematic, cluster, convenience.

14) 49, 34, and 48 students are selected from the Sophomore, Junior, and Senior classes with 496, 348, and 481 students respectively.
   A) Convenience B) Random C) Stratified D) Systematic E) Cluster
   Answer: C

15) A sample consists of every 49th student from a group of 496 students.
   A) Random B) Systematic C) Convenience D) Stratified E) Cluster
   Answer: B

16) A market researcher selects 500 drivers under 30 years of age and 500 drivers over 30 years of age.
   A) Systematic B) Stratified C) Convenience D) Cluster E) Random
   Answer: B

17) A market researcher selects 500 people from each of 10 cities.
   A) Convenience B) Stratified C) Systematic D) Random E) Cluster
   Answer: B
18) A tax auditor selects every 1000th income tax return that is received.
   A) Convenience
   B) Stratified
   C) Random
   D) Systematic
   E) Cluster
   Answer: D

19) An education researcher randomly selects 48 middle schools and interviews all the teachers at each school.
   A) Random
   B) Convenience
   C) Stratified
   D) Systematic
   E) Cluster
   Answer: E

20) To avoid working late, a quality control analyst simply inspects the first 100 items produced in a day.
   A) Convenience
   B) Systematic
   C) Stratified
   D) Random
   E) Cluster
   Answer: A

21) A pollster uses a computer to generate 500 random numbers, then interviews the voters corresponding to those numbers.
   A) Systematic
   B) Stratified
   C) Convenience
   D) Random
   E) Cluster
   Answer: D