

## Worksheet 3.1

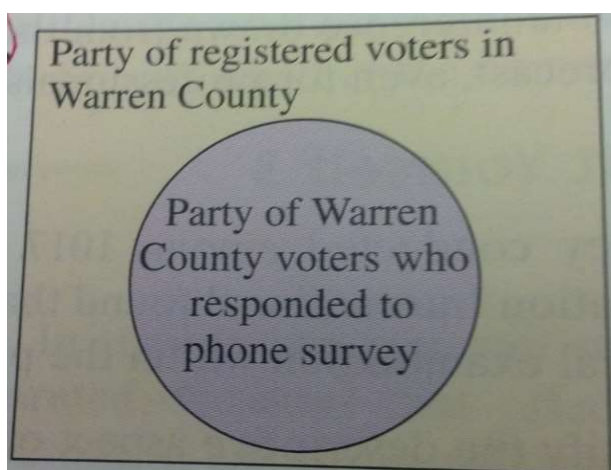
In exercises 1-4, determine whether the statement is true or false. If it is false, rewrite it as a true statement.

1. A statistic is a measure that describes a population characteristic.
2. A sample is a subset of a population.
3. It is impossible for the census Bureau to obtain all the census data about the population of the United States.
4. Inferential statistics involves using a population to draw a conclusion about a corresponding sample.

In Exercises 5-7, determine whether the data set is a population or a sample. Explain your reasoning.

5. The age of each member of the House of Representatives.
6. The height of every fourth person entering an amusement park.
7. A survey of 500 spectators from a stadium with 42,000 spectators.

In Exercise 8, use the Venn diagram to identify the population and the sample.



8.

In Exercises 9-11, identify the population and the sample.

9. A survey of 1000 adults in the United States found that 12% prefer to take their vacation during the winter months. (Source: Rasmussen Reports)
10. A survey of 1045 registered voters found that 19% think the economy is the most important issue to consider when voting for Congress. (Source: Princeton Survey Research Associates International)
11. A survey of 791 vacationers from the United States found that they planned on spending at least \$2000 for their next vacation.

In Exercises 12-15, determine whether the numerical value is a parameter or a statistic. Explain your reasoning.

12. The average annual salary for 35 of a company's 1200 accountants is \$68,000.
13. In a survey of a sample of computer users, 8% said their computer had a malfunction that needed to be repaired by a service technician.
14. In a recent survey of 1503 adults in the United States, 53% said they use both a landline and a cell phone. (Source: Pew Research Center)
15. In a recent year, the average math scores for all graduates on the ACT was 21.1. (Source: ACT, Inc.)
16. Which part of the survey described in Exercise 11 represents the descriptive branch of statistics? Make an inference based on the results of the survey.