Identify the population and the sample. *(Section 8.4)*

1.
Passengers on a train

Passengers in the first train car

2.
DVDs in a video store   DVDs in the comedy section

3. Display the data in a circle graph. *(Section 8.3)*

Favorite Book Genre	Students
Fantasy	20
Historical Fiction	10
Mystery	15
Nonfiction	5

Which sample is better for making a prediction? Explain. *(Section 8.4)*

4.
Predict the number of people who plan to vote in this year's election.	
Sample A	A random sample of 5000 registered voters
Sample B	A random sample of 50,000 United States citizens

5.
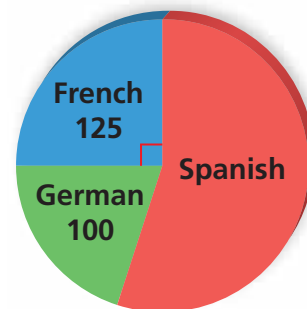| Predict the number of defective light bulbs produced per day.	
Sample A	A sample of the last 1000 light bulbs produced during a day
Sample B	A random sample of 1000 light bulbs produced throughout a day

6. **EXERCISE EQUIPMENT** You want to know how many students in your school support the purchase of new exercise equipment for the gym this year. You survey the first 20 students who arrive for football team tryouts. *(Section 8.4)*

   a. What is the population for your survey? the sample?

   b. Is the sample reasonable? Explain.

7. **WORLD LANGUAGES** Every student in a middle school takes one world language class. *(Section 8.3)*

   a. What fraction of the students take French?

   b. How many students are in the school?

   c. How many students take Spanish?

World Language Classes

French 125
German 100
Spanish

8. **NEWSPAPERS** A survey asks 48 randomly chosen students if they plan to buy a school newspaper this week. Of the 48 surveyed, 32 plan to buy a school newspaper. Predict the number of students enrolled at the school. *(Section 8.4)*

Newspaper Sales	
Faculty	Students
18	360