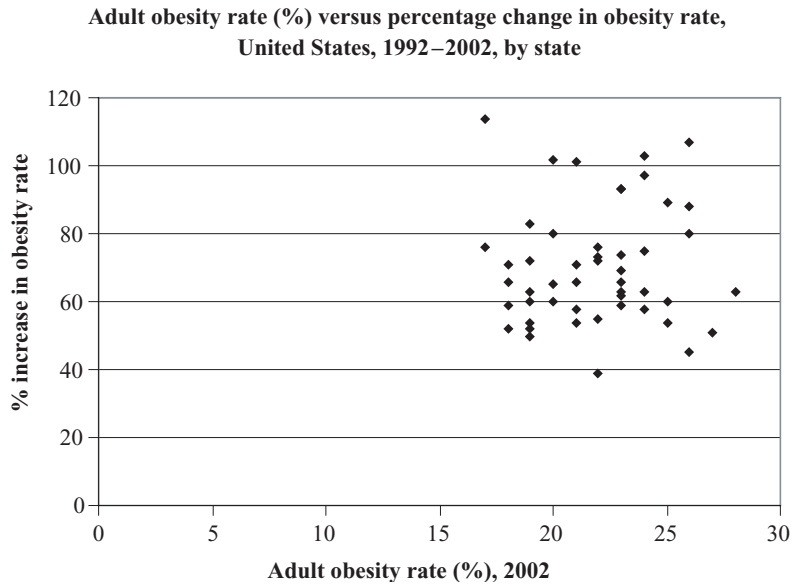# Writing about Distributions and Associations

9

1. Write descriptions of the age, gender, and racial distributions shown in table 6.3 (*Writing about Numbers*, 113).

2. Write a description of the race/household type patterns in table 6.1 (*Writing about Numbers*, 105), using the GEE approach. Hint: to compare across racial/ethnic groups, report percentage distribution of household type within each race. Why are percentages preferred to counts in this case?

3. Write a description of the age pattern of mortality shown in figure 7.15b (*Writing about Numbers*, 159). Use descriptive phrases to convey the shape of the pattern, then document with appropriate numeric evidence. Incorporate selected quantitative comparisons to illustrate size of differences in the chart.

4. What kind of test would you perform to assess the statistical significance of differences in household type by race? (Do not perform the calculation, just name the statistic.)

5.   Refer to figure 9A.

**Adult obesity rate (%) versus percentage change in obesity rate,
United States, 1992–2002, by state**

Figure 9A.

   a. What types of variables are shown?
   b. What kind of chart is used to portray the association? Explain why
       this is an appropriate choice.
   c. Write a description of the pattern in figure 9A, reporting the level and
       range of each of the two variables and portraying the shape and extent
       of association between them.
   d. What statistic would you use to measure the extent of association be-
       tween those variables?

6.   In figure A.2 (*Writing about Numbers*, 275), the pattern of emergency
     room use varies by race and family income. What is such a pattern called
     in statistical terms? In "GEE" lingo? Write paragraphs to describe that
     pattern to
     a. a group of first-year high school students;
     b. a group of graduating statistics majors.