Fox Module 4 Bivariate displays

- Scatter-plot matrices
- Coded scatter-plots

Read Section 3.2, "Plotting bivariate data," on pages 40-43. Scatterplots are for quantitative explanatory variables, and box-plots are for qualitative explanatory variables. Know the statements in the two gray boxes in this section.

Read Section 3.3, "Plotting multivariate data," on pages 43-45, including sections 3.3.1 and 3.3.2. Figure 3.17 on page 44 shows a scatterplot matrix; know how to interpret the scales on each axis.

Scatterplot matrices are excellent tools for visualizing data sets with several dimensions.

*Illustration:* You have personal auto claim frequency data, classified by drive age, sex, marital status, and credit score; use of vehicle, type of vehicle, and miles driven; territory; and other rating variables. You want to know how claim frequency relates to each of these variables, and you also want to know if these variables are related. The scatterplot matrix shows all the relations, and helps you grasp how the variables inter-relate.