

### Chapter 3

**45. Soft drinks** This table summarizes the number of cases (a case has 24 bottles or cans) of different types of soft drinks sold in the United States in 2004. (From *Beverage Digest*, March 4, 2005.)

Brand	Company	Cases (millions)
Coke Classic	Coke	1833
Pepsi-Cola	Pepsi	1180
Diet Coke	Coke	998
Mt Dew	Pepsi	648
Diet Pepsi	Pepsi	625
Sprite	Coke	580
Dr Pepper	Cadbury	574
Caffeine-free Diet Coke	Coke	170
Diet Dr Pepper	Cadbury	140
Sierra Mist	Pepsi	139

- (a) Describe your impression of the underlying data table. Do you think that it has a row for every case of soft drinks that was sold?
- (b) Prepare a chart of these data to be used in a presentation. The plot should emphasize the *share* of the market held by the different brands.
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- (c) Prepare a chart of these data that compares the *share* of the market held by each of the three companies. Is this chart different from the chart used in part (b)? If not, explain how you could use the chart in part (a).
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- (d) Prepare a chart that contrasts the *amounts* of diet and regular soft drinks sold.

**57. Car Auction** Each row of data indicates the make of vehicles sold at auction in the US in 2010. The data table describes 1,884 vehicles.

- (a) Using software, tabulate the frequencies of the makes of cars.
- (b) What is the mode of the make of car?
- (c) Generate a pie chart that shows all of the relative frequencies. What's a problem with this chart?
- (d) Recode the variable that identifies the make of the car so that the resulting pie chart distinguishes the shares of the top five makes. Draw the new pie chart.