16. Camp sites. Shown below are the histogram and summary statistics for the number of camp sites at public parks in Vermont.

<table>
<thead>
<tr>
<th>Count</th>
<th>46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>62.8 sites</td>
</tr>
<tr>
<td>Median</td>
<td>43.5</td>
</tr>
<tr>
<td>SrDev</td>
<td>56.2</td>
</tr>
<tr>
<td>Min</td>
<td>0</td>
</tr>
<tr>
<td>Max</td>
<td>275</td>
</tr>
<tr>
<td>Q1</td>
<td>28</td>
</tr>
<tr>
<td>Q3</td>
<td>78</td>
</tr>
</tbody>
</table>

a) Which statistics would you use to identify the center and spread of this distribution? Why?
b) How many parks would you classify as outliers? Explain.
c) Create a boxplot for these data.
d) Write a few sentences describing the distribution.

17. Hospital stays. The U.S. National Center for Health Statistics compiles data on the length of stay by patients in short-term hospitals and publishes its findings in Vital and Health Statistics. Data from a sample of 39 male patients and 35 female patients on length of stay (in days) are displayed in the histograms below.

a) What would you suggest be changed about these histograms to make them easier to compare?
b) Describe these distributions by writing a few sentences comparing the duration of hospitalization for men and women.
c) Can you suggest a reason for the peak in women’s length of stay?


19. Women’s basketball. Here are boxplots of the points scored during the first 10 games of the season for both Scryne and Alexandra:

a) Describe the overall shapes of these distributions.
b) How do the distributions differ?
c) Look carefully at the bar definitions. Where do these plots violate the rules for statistical graphs?

20. Gas prices. Here are boxplots of weekly gas prices at a service station in the Midwestern United States (prices in $ per gallon):

a) Summarize the similarities and differences in their performance so far.
b) The coach can take only one player to the state championship. Which one should he take? Why?

21. Marriage age. In 1979, did men and women marry at the same age? Here are boxplots of the age at first marriage for a sample of U.S. citizens then. Write a brief report discussing what these data show.

22. Fuel economy. Describe what these boxplots tell you about the relationship between the number of cylinders a car’s engine has and the car’s fuel economy (mpg).

23. Fuel economy II. The Environmental Protection Agency provides fuel economy and pollution information on over 2000 car models. Here is a boxplot of Combined Fuel Economy (using an average of driving conditions) in miles per gallon by vehicle Type (car, van, or SUV). Summarize what you see about the fuel economies of these three vehicle types.

24. Fuel economy III. The Environmental Protection Agency provides fuel economy and pollution information on over 2000 car models. Here is a boxplot of Combined Fuel Economy (using an average of driving conditions) in miles per gallon by whether the car has two- or four-wheel drive. Summarize what you see about the fuel economies of these two types of vehicles.

25. Wine. The boxplots display case prices (in dollars) of varieties of wines produced by vineyards along three of the Finger Lakes:

a) Which lake region produces the most expensive wine?b) Which lake region produces the cheapest wine?
c) In which region are the wines generally more expensive?
d) Write a few sentences describing these wine prices.