## Box-and-Whisker Plots 1

1. A boxplot was made from some data. Find the median, the 1 st quartile, the 3 rd quartile, the minimum, the maximum, and the range of the data.

2. Make a box-and-whisker plot from the following data sets.
a. Initial weights (February) of 14 women in a weight loss study (in pounds):
$\begin{array}{llllllllllllll}189 & 176 & 186 & 200 & 204 & 188 & 175 & 179 & 188 & 190 & 199 & 194 & 187 & 195\end{array}$
b. Weights of the same women one month later (March): $\begin{array}{llllllllllllll}186 & 172 & 180 & 190 & 195 & 179 & 173 & 177 & 180 & 187 & 187 & 190 & 184 & 190\end{array}$
c. Weights of the same women two months later (April):
$\begin{array}{llllllllllllll}180 & 166 & 175 & 183 & 189 & 177 & 170 & 171 & 170 & 184 & 188 & 182 & 180 & 185\end{array}$

d. Compare the data in a and c.

How did the median change?
How did the maximum weight change?
How did the minimum weight change?
How did the range change?
How would you judge the effectiveness of the weight loss method used in the study?

## Sample worksheet from www.mathmammoth.com

