2.12. A Harris Corporation/University of Florida study was undertaken to determine whether a manufacturing process performed at a remote location can be established locally. Test devices (pilots) were set up at both the old and new locations and voltage readings on the process were obtained. A "good process" was considered to be one with voltage readings of at least 9.2 volts (with larger readings being better than smaller readings). The table contains voltage readings for 30 production runs at each location. [data follows in problem]

a. Construct a relative frequency histogram for the voltage readings of the old process.

b. Construct a stem-and-leaf display for the voltage readings of the old process. Which of the two graphs in parts a and b is more informative?

c. Construct a frequency histogram for the voltage readings of the new process.

d. Compare the graphs in parts a and c. (You may want to draw the two histograms on the same graph.) Does it appear that the manufacturing process can be established locally (i.e., is the new process as good or better than the old)?

2.22. Find and interpret the mean, median, and mode for each of the voltage readings data sets in Exercise 2.12. Which is the preferred measure of central tendency? Explain.