

Homework Set 2

**Due Monday, September 27, 2010, before class starts**

1. Reading: Sections 4.1-4.5.
2. A particular system in a space vehicle must work properly in order for it to gain reentry into the earth's atmosphere. One component of the system operates successfully only 85% of the time. To increase the reliability of the system, four of the components are installed in such a way that the system will operate successfully if at least one component is working. What is the probability that the system will fail? Assume the components operate independently.
3. Exercises 4.24, 4.25, 4.27, 4.28, 4.31.

[Typo in 4.25: should be "Refer to Exercise 4.24" .]

**Minitab problem.**

4. Practice graphical methods and descriptive statistics techniques as in Minitab Intro Session handout. Do the following problems in Minitab:
  - (a) For the data in Exercise 3.34, compute the descriptive statistics.
  - (b) For the data in Exercise 3.4, make a histogram with proper title and labels.