Unit 5 – The Normal Distribution
Week #7 - Practice Problems

~~**Due Monday November 3, 2008**~~
Revised Due Date: Monday November 10, 2008

1. Find the proportion of observations from a standard normal distribution that satisfies each of the following statements.

        a. $Z < 2.85$

        b. $Z > 2.85$

        c. $Z > -1.66$

        d. $-1.66 < Z < 2.85$

        e. $Z < -2.25$

        f. $Z > -2.25$

        g. $Z > 1.77$

        h. $-2.25 < Z < 1.77$

2. The height, X, of young American women is distributed normal with mean $\mu=65.5$ and standard deviation $\sigma=2.5$ inches. Find the probability of each of the following events.

        a. $X < 67$

        b. $64 < X < 67$