STAT 575
Homework 2 Problems
due Wednesday February 3

3 Problems to be graded. Show all work. 2 Extra Practice Problems **not** to be graded.

The pages and numbers below are for the 3rd Edition of the textbook. If you have the 4th or 5th edition, then the pages will be different and Chapter 3 is Chapter 5 (for example, 3-4 will be 5-4). I have made Chapter 3 problems available on Blackboard, in case there is any confusion.

1. p. 76, 3-4 (b) and (c)
In addition, graph $S_X(x)$ for $x > 0$ for (b) and (c).
(You can sketch the graph by hand or use computing software.)

2. p. 76, 3-2

3. p. 77, 3-5

Extra Practice Problems NOT to be graded

4. Let X be the age-at-failure random variable with (CDF)

$$F_X(x) = 1 - \frac{1}{1 + x}, \ x \geq 0.$$

Find $S_X(x)$, $f_X(x)$, and $\lambda_X(x)$.

5. p. 76, 3-4 (a)
In addition, graph $S_X(x)$ for $x > 0$ for (a).