Homework 9

Math 262

Write your solutions to the following problems and turn them in to the homework mailbox (RMS level 3, near the fireplace) by 5:00pm on **Monday, April 3**.

Book Problems

- Section 3.1 #1, 3, 7, 10, 11 (pages 191–196)

  Note: There is a typo in #1. The density function should be:

$$f(x) = \begin{cases} 0.075x + 0.2 & \text{if } 3 \le x \le 5 \\ 0 & \text{otherwise} \end{cases}$$

- Section 3.2 #19, 23, 32 (pages 203–207)

Additional Problem

Suppose X is a random variable with pdf

$$f(x) = \begin{cases} ax + bx^2, & 0 \le x \le 1 \\ 0, & \text{otherwise} \end{cases}$$

and $E(X) = \frac{1}{9}$. Either find a and b, or explain why this is not possible.