

## Homework 14

Math 262

Write your solutions to the following problems and turn them in to the homework mailbox (RMS level 3, near the fireplace) by 4:00pm on **Friday, May 4**.

### Book Problems

- Section 4.3 #57, 60, 62, 64 (pages 272–277)
- Section 4.4 #68, 69, 73, (pages 286–289)

*Hint:* For #68, recall that  $f_X(x) = 10kx^2 + 0.05$ , for  $20 \leq x \leq 30$ , where  $k = \frac{3}{380,000}$ . By symmetry of  $X$  and  $Y$ ,  $f_Y(y)$  is similar.