

## HOMEWORK ASSIGNMENTS - STAT 3611 (SECTION 2) - FALL 2009

### ASSIGNMENT #10, Due Wednesday, December 9

p.297-298: # 9.35, 9.36, 9.39, 9.41.

p.304-306: # 9.51, 9.53, 9.56, 9.62, 9.64, 9.67, 9.69

p.310: # 9.72, 9.74.

p. 357: # 10.19, 10.21, 10.23, 10.25

Suggested problems (no need to hand in).

p. 336-337: # 10.1, 10.5

p.366: #10.55, 10.57, 10.61.

p. 226-228: # 7.16, 7.17, 7.18, 7.19.

Additional problem: Let  $f(x)$  be a probability distribution function  $f(x)$ :  $f(0)= 0.4$  and  $f(1)=0.6$ .

- a. If  $X$  is a random variable having probability function  $f(x)$ , find the moment generating functions for  $X$  and  $2X+1$ .
- b. If  $X_1$  and  $X_2$  are two independent random variables having the same distribution  $f(x)$ , find the moment generating function for  $X_1+X_2$ .