Homework 5 for STA 250/MTH 342 – Fall 2017

Due at the beginning of class on October 4, 2017

1. D&S (4th Ed.) Exercise 7.5.6 (page 425)

2. D&S (4th Ed.) Exercise 7.5.8 (page 425)

3. D&S (4th Ed.) Exercise 7.5.10 (page 425)

4. D&S (4th Ed.) Exercise 7.5.12 (page 426) (For this problem, you are not required to verify that the MLE you find is the global maximizer of the likelihood function.)

5. D&S (4th Ed.) Exercise 7.6.4 (page 441)

6. D&S (4th Ed.) Exercise 7.6.6 (page 441)

7. D&S (4th Ed.) Exercise 7.6.8 (page 441) (Hint: You may use the fact that the function $\psi(\alpha) = \Gamma'(\alpha)/\Gamma(\alpha)$ is strictly increasing on $\alpha > 0$.)