

Problem Set 8
(Lecture 15 & Lecture 16)
Due: 11/1

*****Question numbers and pages based on 7th Edition, please make sure you check and do the proper questions if using a different version*****

1. Derive the variance of the Beta distribution assuming we know that the mean is $\frac{\alpha}{\alpha+\beta}$.
2. Textbook Exercise 4.125
3. A special case of the beta distribution is the continuous uniform distribution over the interval $[0,1]$. Use the pdf of the beta distribution in order to find the α and β for which this special case occurs.
4. Textbook Exercise 5.3
5. Textbook Exercise 5.11
6. Textbook Exercise 5.15