

MTH U481: Spring 2008: Prof. C. King

Assignment 8

Due date: Thursday March 14.

Reading: Sections 3.7 - 3.9.

Problems:

1). p. 233, #6, #11.

2). p. 236, #18, #19.

3). A point is chosen at random from a triangle with corners at $(0, 0)$, $(2, 0)$ and $(1, 1)$. Let (X, Y) be the coordinates of the point chosen.

a) Write down the joint pdf of X, Y .

b) Calculate the marginal pdf's of X and Y .

c) Find the mean and variance of X .

d) Are X and Y independent? Explain.

4). p. 212, #19(a),(e); #20(a); #22.