

MTH U481: Spring 2009: Prof. C. King

Assignment 7

Due date: Monday February 23.

Reading: Sections 3.6, 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).

5). p.212, #20(a).

6). p.212, #22.