# Homework 5 Math 611 Probability 

due Tuesday Oct. 112011 by 6:20pm

From the lecture 2 - notes posted please solve the following problems: Problems 2.13, 2.14, 2.15 on page 61

Additionally do the following two problems.

1. Look at the distribution of the $X, Y$ variables given by the BoxMuller method (Lecture 3 extra file - page 72). Calculate the joint and marginal distributions of these variables and show they are independent.
2. Repeat the problem above for the variables $X, Y$ given in the polar rejection method (page 73 in the same notes).
