Homework 5 Math 611 Probability

due Tuesday Oct. 11 2011 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 Box-Muller 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).