

Theory of Statistics II (BIST 0614) - Spring 2005
Homework 1

1. Problems 4.39 and 4.44 in the textbook
2. If X_1, X_2 and X_3 has a pmf $f(x_1, x_2, x_3) = \frac{1}{4}$ at four points $(1, 0, 0)$, $(0, 1, 0)$, $(0, 0, 1)$ and $(1, 1, 1)$ and 0 otherwise, prove that X_1, X_2 and X_3 are pairwise independent, but not mutually independent.