

**MTH U481: Spring 2008: Prof. C. King**

**Assignment 7**

**Due date:** Thursday February 28.

**Reading:** Sections 3.4 - 3.6.

**Problems:**

1). p. 198, #2, #6, #7, #11, #15.

2). p. 210, #5, #7, #8.

3). For the table given in Problem #7 on p. 210, compute the marginal pdf's for  $X$  and  $Y$ , compute the mean and variance of  $X$  and  $Y$ , and compute the covariance and correlation coefficient for the pair  $X, Y$ . [Note: you must divide by 50 (the total number of students) to get the joint probabilities]. Are  $X$  and  $Y$  independent? Explain.