Department of Mathematics and Statistics KFUPM STAT 301-01 Quiz#1, Time: 15 mins

Student's Name: ______ ID: _____

Q.No.1: - Suppose that two teams play a series of games that ends when one of them has won 2 games. Suppose that each game played is, independently, won by team A with probability p.

(a) Find the expected number of games that are played.

(b) For what value of p, the expected value found in part (a) is maximized? Justify your answer.

Best of Luck