King Fahd University of Petroleum and Minerals
Department of Mathematics and Statistics
Math 131- Test 3

**Exercise 1** *On a 8 question multiple-choice test, where each question has 2 answers, what would be the probability of getting at least one question wrong?*

**Exercise 2** *A hacker is trying to guess someone's password. The hacker knows (somehow) that the password is 9 characters long, and that each character is either a lowercase letter, (a, b, c, etc), an uppercase letter (A, B, C, etc) or a numerical digit (0, 1, 2, 3, 4, 5, 6, 7, 8, or 9). Assume that the hacker makes random guesses. What is the probability that the hacker guesses the password on his first try?*