Name:		
Date: 3/6/2025		

Some formulas you may need:

 $P(X = x) =_n C_x p^x q^{n-x}$ $EV = \mu = np$ $\sigma^2 = npq$ $\sigma = \sqrt{npq}$

Math 130 Quiz 8

1. (2, 2, 3, 1, 2 points) John the gambler loves betting on green in the game of roulette. Suppose John is about to bet on green 10 times in a row. Let X denote the total number of times he wins among the 10 spins.

a) List the 7 things you are supposed to list when dealing with this kind of random variable.

b) What is the probability that John will win exactly 3 times?

c) What is the probability that John will win at most 2 times?

d) What is the probability that John will win more than 2 times?

e) Find the expected value of the random variable in this problem and explain its meaning.