

Math 110
Spring, 2009

Name _____
Calculator _____

Homework #8

Due Thursday, April 9

No late papers accepted! No excuses!

1. A jar contains 5 red, 3 blue, 2 green, 4 yellow, and 1 white marble. Two marbles are chosen at random without replacement. Let the random variable x represent the number of red marbles chosen. Construct a probability distribution for the random variable and find the mean and the standard deviation.

2. 63% of college freshmen need remedial math courses. Randomly choose 10 college freshmen.
 - a) Find the expected number out of the 10 that would need remedial math courses.
 - b) Find the mean out of the 10 that would need remedial math courses.
 - c) Find the standard deviation for the number out of 10 that would need remedial math courses.
 - d) Find the probability that 6 of the 10 need remedial math courses.
 - e) Would it be unusual to find that none of the ten needed remedial math courses? Why or why not?