Sample Space Having Equally Likely Outcomes

Date – February 3, 2014 (Mon)

Problem 1. There are 6 white balls and 5 black balls in a bowl. If 3 balls are randomly drawn, what is the probability that one ball will be white and the other two are black?

Problem 2. Five people are to be randomly selected from a group of 20 individuals consisting of 10 married couples. What is the probability that no two are married to each other?

Problem 3. There are \( n \) balls numbered from 1 to \( n \). What is the probability that the ball numbered as 1 will be chosen, if we randomly pick \( k \) balls, one at a time?