

STATISTICS 1040
Quiz 5, Fall 2014

Name _____
Recitation Instructor _____ Time _____

1. Two draws are made from the following box containing blue and white tickets.

[B , B , B , W , W , W , W]

a) If the draws are made with replacement, find the probability that at least one white ticket is drawn. (2 points)

b) If the draws are made without replacement, find the probability that at least one white ticket is drawn. (2 points)

2. One ticket will be drawn from each of the two boxes shown below.

Box A : [5 , 6 , 7 , 8] Box B : [6 , 7 , 8 , 9]

Find the probability that the sum of the two numbers is greater than or equal to 14.
(2 points)

3. A department store runs a promotion where every customer independently draws a *scratch and win* ticket. Suppose that 40% of the tickets are *winners* and you visit the store twice during the promotion.

a) What is the chance that you get a *winner* on both visits? (2 points)

b) What is the chance that you get a *winner* on your first visit or a *winner* on your second visit? (2 points)