Name: _____ Date: _____ Row: _____ Period: ____

NOTES 12.5: PROBABILITY OF INDPENDENT AND DEPENDENT EVENTS

INDEPENDENT EVENTS

EXAMPLE 1

A game claims that 1 in every ____ people win. What is the probability that you win ____ in a row?

EXAMPLE 2

In a survey ____ out of 11 men and ____ out of 7 women said they were married. If the next 3 customers are ____ women and ____ man, what is the probability that they will all be married?

EXAMPLE 3

Using the survey from example 2, if ____ men are the next customers, what is the probability that at least one of them is not married?

YOUR TURN

A bag contains ____ red marbles, ____ white marbles, and ____ blue marbles. You draw ____ marbles, replacing each one before the next. What is the probability of drawing a red, then a blue, and then a white marble?

DEPENDENT EVENTS

EXAMPLE 5

The table shows the camp attendance for three age groups of students in one town.

Age	Attended Camp	No Camp
5-7		117
8-10		62
11-13		79

a) Find the probability that a listed student attended camp.

b) Find the probability that a child in the 8-10 age group from the town did not attend camp.

EXAMPLE 6

You randomly select two cards from a standard 52-card deck.
Find the probability that the first card is a _____ and the second card is _____ if

a) you replace the first card before selecting the second

b) you do not replace the first card

EXAMPLE 7

Three children have a choice of ___ summer camps that they can attend. If they each randomly choose which camp to attend, what is the probability that they attended all different camps?

YOUR TURN

A family of ___ is each choosing 1 of 8 possible vacations. What is the probability that each family member picks a different vacation for his or her first choice?