

Name: _____

Date: _____

7R

Homework 9.8

Dependent Events

#1-4 Determine if the event is *independent* or *dependent*.

1) tossing a coin and spinning a spinner _____

2) Anna draws a toothpick from a jar without replacing it, she draws a second toothpick _____

3) Joe draws a card from a deck of cards, replaces it, then draws a second card. _____

4) Choose a red jelly bean from a bag, eat it, and choose another red from the bag _____

5) A bag contains 8 red marbles and 4 blue marbles. You draw a marble at random, **do not replace it**, and draw another marble at random.

P (red, blue) =

6) A bag of *Jelly Belly* jellybeans has 3 cherry, 1 orange and 2 watermelon jellybeans. Sean randomly selects a jellybean, **eats it** and randomly selects another jellybean.

P (orange, watermelon) =



7) A bowl of candy has 4 *M&M's*, 2 Kit Kats and 3 Snickers. Lisa randomly selects a piece of candy, **does not replace** it and randomly selects another.

P (*M&M's*, *M&M's*) =

Review It!

8) What is the total number of outcomes for tossing a coin and spinning a spinner with five equal sections, 1-5? *Use the Fundamental Counting Principle.*

#9-13 At Abby's Snack Shop customers have a choice of three drinks water, iced tea or lemonade. They have a choice of a lemon or lime twist. They also have a choice of a small or large glass.

9) Create a tree diagram to see the possible outcomes.

10) List the sample space.

11) How many possible outcomes are there? _____

12) $P(\text{lemonade, lemon twist, small}) =$ _____

13) $P(\text{small iced tea}) =$ _____

14) A bowl of candy has 4 *M&M's*, 2 Kit Kats and 3 Snickers. Lisa randomly selects a piece of candy, **replaces it** and randomly selects another. (Independent Event...look back at CW 9.7)

$P(M\&M's, M\&M's) =$