

Name: _____

Unit 8: Probability & Statistics

#71

Date: _____ Per: _____

Homework 4: Tree Diagrams &
The Counting Principle

**** This is a 2-page document! ****

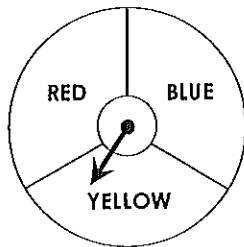
Draw a tree diagram, then list the sample space and determine the number of outcomes.

1. A t-shirt company sells shirts in 4 different sizes (S, M, L and XL) that are available in blue, red, white, black or gray. A shirt is selected at random.

Sample Space:

of Outcomes

2. The spinner below is spun and a letter from the word **MATH** is chosen.



Sample Space:

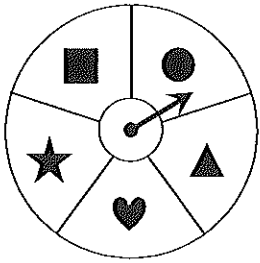
of Outcomes

3. A coin is flipped and a digit from 1 – 9 is chosen at random.

Sample Space:

of Outcomes

4. A letter is chosen at random from the word **CAR** and the spinner below is spun.



Sample Space:	# of Outcomes
Use the counting principle to find the total number of outcomes.	
5. How many options does Ana have if she can choose from 4 different types of lettuce and 9 different dressings?	
6. A twelve sectioned spinner is spun once, then a standard die is rolled. Find the total number of outcomes.	
7. How many different kitchen islands can be made from 7 cabinet choices and 6 different countertops?	
8. Heather is ordering invitations and can choose from 5 different types of paper and 9 different fonts. Find the total number of invitations she could make.	
9. Nick is designing a toy car. He is picking between 8 different car models and 10 colors. Find the total number of cars he could design.	
10. Six different people each brought four dishes to a gathering. Find the total number of dishes.	
11. Marissa is pouring drinks at a birthday party. She has three different sizes of cups and seven different flavors of juice. How many different cups of juice can she pour?	
12. A coin is flipped and a letter from the word COMPUTER is chosen. How many outcomes are there?	
13. A child from a class of 28 students is chosen to pick one of five prizes. How many outcomes are there?	