### HW 9-2

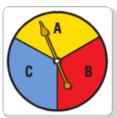
## Tree Diagrams &

# Int 1 Fundamental Counting Principle

Unit 9

Draw a tree diagram to show all possible outcomes for each situation. State the total number of possible outcomes.

1) The spinner below is spun 2 times.



Total # of Outcomes:

Total # of Outcomes:\_\_\_\_

2) Two dice are rolled

two types of sauce and a choice of meatballs
or sausage.

5) A restaurant offers three types of pasta with

Total # of Outcomes:

6) Andrew has a choice of blue, yellow, white or striped shirt with a choice of black, navy, or tan pants.

Total # of Outcomes:

3) Choosing a bagel with one type of cream cheese from the list shown in the table.

	Cream	
Bagels	Cheese	
Plain	Plain	
Blueberry	Chive	
	Sun-dried	
Raisin	Tomato	
Garlic		

Total # of Outcomes:

4) A sandwich consisting of one type of meat and one type of bread

Meat	Bread
Ham	Rye
Turkey	Sourdough
	White

Total # of Outcomes:\_\_\_\_

Tossing a coin and spinning the spinner below



Total # of Outcomes:

**8)** Choosing a purple, green, black, or silver bike having 10, 18, 21, or 24 speeds.

# Use the Fundamental Counting Principle to find the total number of possible outcomes for each situation. You DO NOT need to draw a tree diagram.

9) A coin is tossed and a die is rolled

**16)** Two coins are tossed and a die is rolled

- 10) Four coins are tossed
- 11) A number from 1-50 and a color from 8 colors are chosen
- **12)** Picking a number from 1 to 5 and choosing the color red, white or blue.
- **13)** Choosing a letter from the word SPACE and choosing a consonant from the word MATH.
- 14) Each spinner is spun once.



**15)** School sweatshirts come in four sizes and four colors

- 17) A car comes with two or four doors, a four or six-cylinder engine and a choice of 6 colors.
- **18)** A quiz has 5 true or false questions.
- **19)** There are 4 answer choices for each of five multiple-choice questions on a quiz.
- **20)** Number of different sandwich and side combos you can have using the table below.

Sandwiches	Sides
Ham	Pasta Salad
Turkey	Fruit Cups
	Potato
Roast Beef	Chips
Tuna Salad	Side Salads
Vegetarian	

- **21)** Picking a month of the year and a day of the week.
- **22)** Choosing from a comedy, horror, or action movie each shown in four different theaters.

#### **REVIEW OUESTIONS**

- **23)** What is probability that a calendar is randomly turned to the month of January or April?
- **24)** Jamie found that 30% of the jellybeans in a bag were red. Suppose there are 250 jellybeans in the bag. How many beans in the bag are NOT red?