

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: _____

- 2) Two dice are rolled

Total # of Outcomes: _____

- 5) A restaurant offers three types of pasta with two types of sauce and a choice of meatballs or sausage.

Total # of Outcomes: _____

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

Total # of Outcomes: _____

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

Total # of Outcomes: _____

- 7) Tossing a coin and spinning the spinner below



Total # of Outcomes: _____

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

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

Meat	Bread
Ham	Rye
Turkey	Sourdough
	White

Total # of Outcomes: _____

Total # of Outcomes: _____

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

17) A car comes with two or four doors, a four or six-cylinder engine and a choice of 6 colors.

11) A number from 1-50 and a color from 8 colors are chosen

18) A quiz has 5 true or false questions.

12) Picking a number from 1 to 5 and choosing the color red, white or blue.

19) There are 4 answer choices for each of five multiple-choice questions on a quiz.

13) Choosing a letter from the word SPACE and choosing a consonant from the word MATH.

20) Number of different sandwich and side combos you can have using the table below.

14) Each spinner is spun once.



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

15) School sweatshirts come in four sizes and four colors

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 QUESTIONS

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?