

HW 9-2

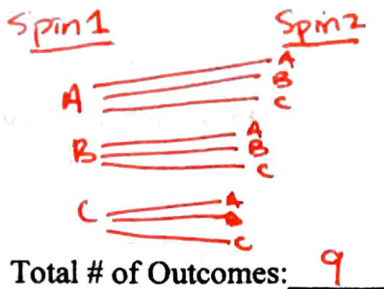
Tree Diagrams & Fundamental Counting Principle

Int 1

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.



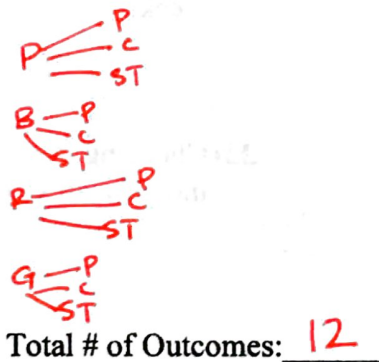
2) Two dice are rolled

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

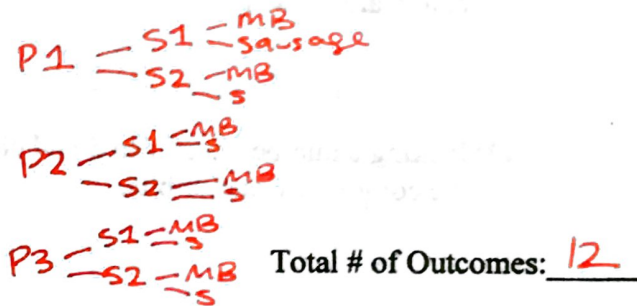
3) Choosing a bagel with one type of cream cheese from the list shown in the table.

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

Bagels	Cream Cheese
P Plain	P Plain
B Blueberry	C Chive
R Raisin	ST Sun-dried Tomato
G Garlic	

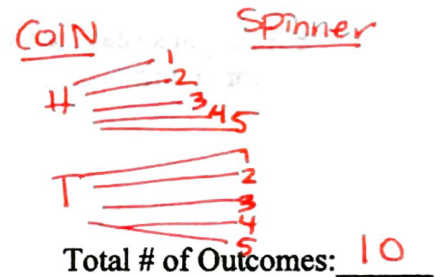
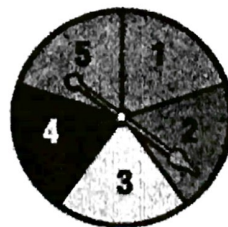


5) A restaurant offers three types of pasta with two types of sauce and a choice of meatballs or sausage. P=pasta S=sauce



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

7) Tossing a coin and spinning the spinner below



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

12 ways

10) Four coins are tossed

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

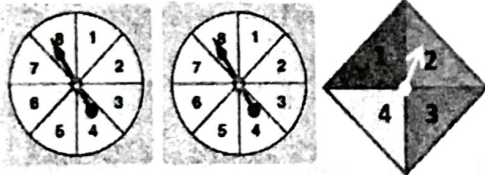
400 outcomes

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.

15 outcomes

14) Each spinner is spun once.



15) School sweatshirts come in four sizes and for colors

16 outcomes

### REVIEW QUESTIONS

23) What is probability that a calendar is randomly turned to the month of January or April?

$$\frac{1}{6} = .1\bar{6} = 16.\bar{6}\%$$

16) Two coins are tossed and a die is rolled

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

24 outcomes

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.

1024 ways

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

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

21) Picking a month of the year and a day of the week.

84 ways

22) Choosing from a comedy, horror, or action movie each shown in for different theaters.

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?