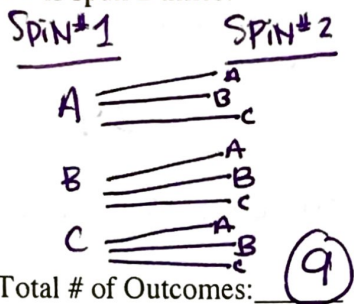
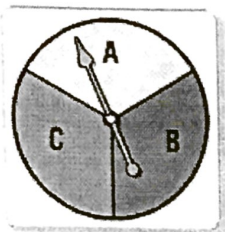


HW 9-3

Tree Diagrams & Fundamental Counting Principle

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.

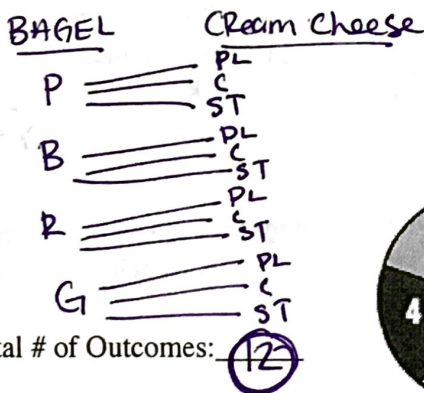


2) Two dice are rolled

Total # of Outcomes: _____

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

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

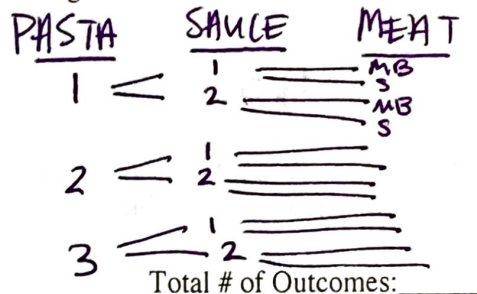


Total # of Outcomes: _____

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

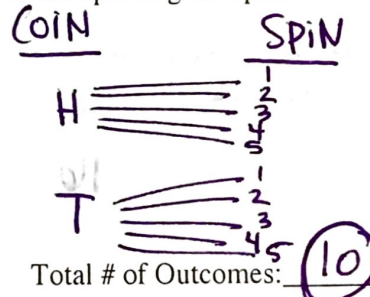
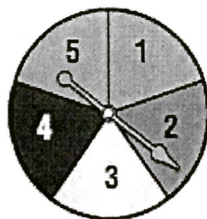
Meat	Bread
Ham	Rye
Turkey	Sourdough
	White

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



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



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

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

10) Four coins are tossed

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

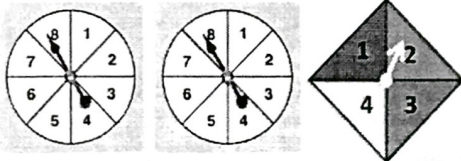
400

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

14) Each spinner is spun once.

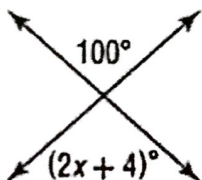


15) School sweatshirts come in four sizes and four colors

16

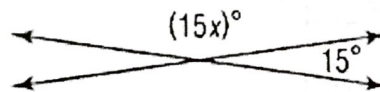
For problems 23 and 24, set up an equation and solve for x.

23)



$$x = 48$$

24)



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

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.

1,024

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

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