1. Complete Probability Worksheet #3 in your notebooks

Probability Worksheet #3: Representing Sample Spaces

Name

Represent the sample space for each experiment by making a tree diagram.

- 1. Michelle could take a summer job in California or Arizona at a hotel or a bed-and-breakfast.
- 2. Jeremy could go to baseball or soccer camp as a counselor or an assistant director.

- 3. Brad could buy his mom a \$25 or \$50 gift card for a spa or a housecleaning service.
- 4. Tavya can spend the summer with her cousins or her gradnparents at the lake or at the beach.

- 5. Jordan can write his final essay in class or at home on a scientific or an historical topic.
- 6. Julio can join the Air Force or the Army before or the Army before or after college.

Use the Fundamental Counting Principle to find the number of possible outcomes for each situation.

7. Marie's family is buying a house. They must choose one from each category.

House Plans	Number of
	Choices
Subdivision location	4
Floor plans	5
Garage size	2
Front yard landscape package	3
Backyard pool package	3

8. Mr. Thomson is choosing his cable TV. He must choose one from each category.

Cable TV Plans	Number of
	Choices
Channel packages	16
DVR system	3
Contract length	3
Service contract	2
Include phone	2
Include Internet	2

9. Josh is making a stuffed animal.

Animal Option	Number of Choices
Animals	10
Type of stuffing	3
Sound effect	5
Eye color	3
Outfit	20

10. Kelley is buying an ice cream cone. Assume one of each category is ordered.

Ice Cream	Number of Choices
Type of cone	3
Flavors	20
Cookie toppings	4
Candy toppings	8

- Valentine gift sets come with a choice of 4 different teddy bears, 8 types of candy, 5 balloon designs, and 3 colors of roses.
- Joni wears a school uniform that consists of a skirt or pants, a white shirt, a blue jacket or sweater, white Socks and black shoes. She has 3 pairs of pants, 3 skirts, 6 shirts, 2 jackets, 2 sweaters, 6 pairs of Socks and 3 pairs of black shoes.
- Movie-themed gift baskets come with a choice of one of each of the following: 4 flavors of popcorn, 4 different DVD's, 4 types of drinks, and 8 different kinds of candy.
- 14. Jack is choosing an internship program that could take place in 3 different months, in 4 different Departments of 3 different firms. Jack is only available to complete his internship in July. How Many different outcomes are there for Jack's internship?