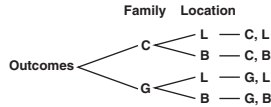# 13-1 Practice

Representing Sample Spaces

Represent the sample space for each experiment by making an organized list, a table, and a tree diagram.

1. Tavya can spend the summer with her cousins or her grandparents at the lake or at the beach.
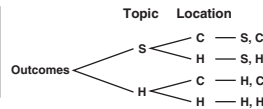
CL, CB, GL, GB

Outcomes	Lake	Beach
Cousins	C, L	C, B
Grandparents	G, L	G, B

2. Jordan can write his final essay in class or at home on a scientific or an historical topic.
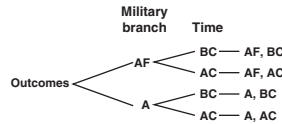
SC, SH, HC, HH

Outcomes	In Class	At Home
Scientific	S, C	S, H
Historical	H, C	H, H

3. Julio can join the Air Force or the Army before or after college.

AF, BC; AF, AC; A, BC; A, AC

Outcomes	Before College	After College
Air Force	AF, BC	AF, AC
Army	A, BC	A, AC

Find the number of possible outcomes for each situation.

4. Josh is making a stuffed animal.

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

9000

5. 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

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6. Movie-themed gift baskets come with a choice of one of each of the following: 4 flavors of popcorn, 4 different DVDs, 4 types of drinks, and 8 different kinds of candy.

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7. **INTERNSHIP** 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?

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