Lesson 5 Homework Practice

Fundamental Counting Principle

Use the Fundamental Counting Principle to find the total number of outcomes in each situation.

1. choosing from 8 car models, 5 exterior paint colors, and 2 interior colors

2. selecting a year in the last decade and a month of the year

3. picking from 3 theme parks and 1-day, 2-day, 3-day, and 5-day passes

4. choosing a meat and cheese sandwich from the list shown in the table

Cheese	Meat
Provolone	Salami
Swiss	Turkey
American	Tuna
Cheddar	Ham

5. tossing a coin and rolling 3 number cubes

6. selecting coffee in regular or decaf, with or without cream, and with or without sweeteners

7 **COINS** Find the number of possible outcomes if 2 quarters, 4 dimes, and 1 nickel are tossed.

8. **SOCIAL SECURITY** Find the number of possible 9-digit social security numbers if the digits may be repeated.

9. **AIRPORTS** Jolon will be staying with his grandparents for a week. There are four flights that leave the airport near Jolon's home that connect to an airport that has two different flights to his grandparents' hometown. Find the number of possible flights. Then find the probability of taking the earliest flight from each airport if the flight is selected at random.

10. **ANALYZE TABLES** The table shows the kinds of homes offered by a residential builder. If the builder offers a discount on one home at random, find the probability it will be a 4-bedroom home with an open porch. Explain your reasoning.

Number of Bedrooms	Style of Kitchen	Type of Porch
5-bedroom	Mediterranean	Open
4-bedroom	Contemporary	Screen
3-bedroom	Southwestern	