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## 7-5 Additional Practice

1. Before an upcoming soccer tournament, teams are assigned unique uniforms designed with the colors yellow $(\mathrm{Y})$, green ( G ), orange ( O ), and purple (P). Each uniform is mostly one color with a different colored stripe.

Write an organized list using the format (main color, stripe color) to represent the sample space.
2. A tailor designed two pairs of pants ( P 1 and P 2 ) and five tops (T1, T2, T3, T4, and T5) to create outfits.
a. Create a tree diagram to display the sample space of possible outfits that consist of a top and a pair of pants.
b. How many different outfits can the tailor create?
3. Two friends each choose a slice of pizza with one topping. The available toppings are tomatoes ( T ), jalapeños (J), onions ( O ), and eggplant ( E ). Write an organized list using the format (Friend 1, Friend 2) to represent the sample space of toppings chosen between the two friends.
4. Complete the table to represent the sample space of two-digit numbers using the digits $1,4,5$, and 9 . Use the column label as the tens digit and the row label as the ones digit to complete the table.

| Sample Space |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 4 | 5 | 9 |
| 1 | $\square$ | $\square$ | $\square$ | $\square$ |
| 4 | $\square$ | $\square$ | $\square$ | $\square$ |
| 5 | $\square$ | $\square$ | $\square$ | $\square$ |
| 9 | $\square$ | $\square$ | $\square$ | $\square$ |

5. A museum gift shop sells hats with embroidered logos of the museum.

The hats are available in small, medium, and large sizes. They are available in the colors red and green.

Make a tree diagram to represent all possible varieties of hats sold at the museum.
6. Higher Order Thinking Vincent forgot the last two digits of his bicycle lock. He remembers that each digit is 5 or greater. Based on the table below, how many possible pairs of digits are there? Make another table to show all possible combinations if he remembers that the first digit is 6,8 , or 9 .

|  | 5 | 6 | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 55 | 65 | 75 | 85 | 95 |
| 6 | 56 | 66 | 76 | 86 | 96 |
| 7 | 57 | 67 | 77 | 87 | 97 |
| 8 | 58 | 68 | 78 | 88 | 98 |
| 9 | 59 | 69 | 79 | 89 | 99 |

## Assessment Practice

7. A table with 3 rows and 5 columns can represent the sample space of combinations of a number between 1 and 3 followed by a letter between A and E in the English alphabet.

PART A
Complete the table to represent the sample space of possible combinations.

|  | A | B | C | D | E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 2 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| 3 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

## PART B

Which of the following describes the dimensions of a different table that could be used to describe the same sample space?
(A) A table with 8 rows and 3 columns
(B) A table with 5 rows and 3 columns
(C) A table with 3 rows and 8 columns
(D) A table with 3 rows and 3 columns

