Section 10.R.5 Determining Sample Spaces

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Determining Sample Spaces

Activities involving chance such as tossing a coin, rolling a die, spinning a wheel in a game, and predicting

weather are called _____. The likelihood of a particular result is called its _____

Terms Related to Probability

_____	An individual result of an experiment.
_____	The set of all possible outcomes of an experiment.
_____	Some (or all) of the outcomes from the sample space.

A **tree diagram** can be used to_____. Each branch of

the tree diagram shows_____.

▶ **Example 2   Finding the Sample Space Using a Tree Diagram**

A coin is tossed twice. Draw a tree diagram illustrating the possible outcomes of the experiment and list the outcomes in the sample space.

Solution

Exercises

For each experiment, draw a tree diagram illustrating the possible outcomes and list the outcomes in the sample space.

1. When ordering pizza, a crust is chosen (crispy or thick) followed by choosing a topping (cheese, pepperoni, or sausage).

2. A game is played by tossing a coin followed by spinning a spinner with three colors: yellow, blue, and orange.

3. You have two pairs of pants: jeans and khaki pants. You also have three shirts: a blue one, a green one, and a black one. How many outfits can you make?

4. A coin is tossed followed by choosing a number from 1 to 4.

5. A spinner with two colors (yellow and blue) is spun followed by rolling a die

6. A coin is tossed 4 times.