

Lesson 3 Reteach

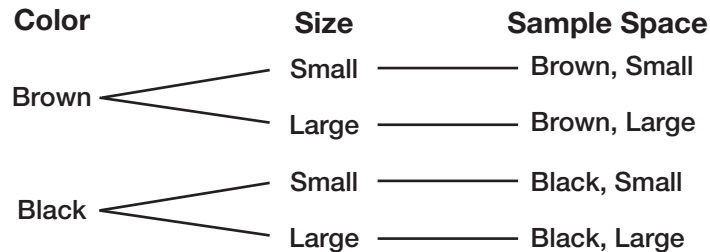
Probability of Compound Events

A **tree diagram** or table is used to show all of the possible outcomes, or **sample space**, in a probability experiment.

Example 1

WATCHES A certain type of watch comes in brown or black and in a small or large size. Find the number of color-size combinations that are possible.

Make a tree diagram to show the sample space. Then give the total number of outcomes.

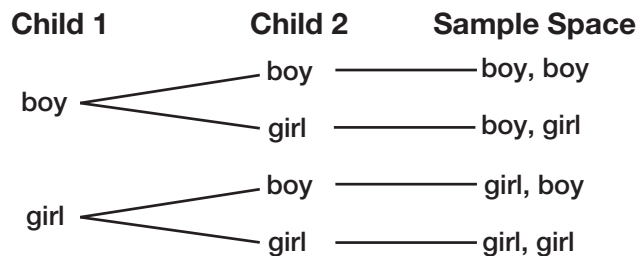


There are four different color and size combinations.

Example 2

CHILDREN The chance of having either a boy or a girl is 50%. What is the probability of the Smiths having two girls?

Make a tree diagram to show the sample space. Then find the probability of having two girls.



The sample space contains 4 possible outcomes. Only 1 outcome has both children being girls. So, the probability of the Smiths having two girls is $\frac{1}{4}$.

Exercises

For each situation, make a tree diagram to show the sample space. Then give the total number of outcomes.

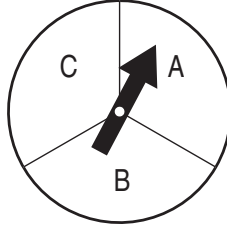
1. choosing an outfit from a green shirt, blue shirt, or a red shirt, and black pants or blue pants
2. choosing a vowel from the word COUNTING and a consonant from the word PRIME

Lesson 3 Skills Practice

Probability of Compound Events

The spinner at the right is spun twice.

1. Draw a tree diagram to represent the situation.
2. What is the probability of getting at least one A?



For each situation, make a tree diagram to show the sample space. Then give the total number of outcomes.

3. choosing a hamburger or hot dog and potato salad or macaroni salad
4. choosing a vowel from the word COMPUTER and a consonant from the word BOOK
5. choosing between the numbers 1, 2 or 3, and the colors blue, red, or green