

LESSON
19-3

Practice A
Compound Events

Determine which event(s) are mutually exclusive.

1. Students are forming 4 softball teams by each picking one of four different-color cards from a bag. Are the events “choosing a red card” and “choosing a blue card” mutually exclusive? Explain why or why not.

2. Are the events “choosing a black card” from a deck of playing cards and “choosing a 10” mutually exclusive? Explain why or why not.

Solve.

3. Apples are in $\frac{1}{4}$ of all of the lunch bags that are distributed at a school picnic, and bananas are in $\frac{1}{3}$ of the bags. What is the probability of randomly choosing a lunch bag that contains either an apple or a banana?

4. A group of senior citizens have won free vacation packages. The vacation to Bermuda is chosen by 25% of them, 60% choose Alaska, and 15% choose Costa Rica. What is the probability that one randomly selected senior citizen chooses to vacation in Costa Rica or Bermuda?

Pam rolls a 1–6 number cube. Find each probability.

5. Pam rolls a 3 or a 6.
6. Pam rolls an even number.
7. Pam rolls an odd or even number.
8. Pam rolls an odd number or a 3.
9. Pam rolls an odd number or a number greater than 4.

Use the data to fill in the Venn diagram. Then solve.

10. Of the 65 students going on the soccer trip, 43 are players and 12 are left-handed. Only 5 of the left-handed students are soccer players. What is the probability that one of the students on the trip is a soccer player or is left-handed?

