

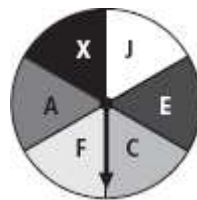
13-4 Practice Compound Probability

Form G

For Exercises 1–3, determine whether the events are *independent* or *dependent*.

- You roll a 2 on a number cube and spin a 3 on a spinner.
- You choose a King from a deck of cards and get heads in a coin toss.
- You roll a number cube and get a 6, and roll again if the first roll is a 6.
- What is $P(A \text{ and } B)$ if $P(A) = \frac{1}{2}$ and $P(B) = \frac{2}{7}$, where A and B are independent events?
- What is the probability of rolling a 4 on a fair number cube and getting “tails” when tossing a coin?
- What is $P(A \text{ or } B)$ if $P(A) = 32\%$ and $P(B) = 17\%$, where A and B are mutually exclusive events?
- At a local high school, 34% of the students take a bus to school and 56% of the students walk to school. What is the probability of randomly selecting a student that takes a bus or walks to school?
- What is $P(A \text{ or } B)$ if $P(A) = \frac{1}{4}$ and $P(B) = \frac{1}{2}$, where A and B are overlapping events?
- A spinner has 8 equal sections numbered 1 to 8. What is the probability of the spinner stopping on a number that is a multiple of 3 or is greater than 5?
- A local aquarium has 6 turtles, 12 penguins, and 8 sharks. You randomly select 1 animal to watch. What is the probability that you select a turtle or a shark?
- In a local town, 55% of the residents drive to work, 23% of the residents own a dog, and 6% of the residents walk to work. Find the probability that a randomly chosen resident owns a dog or walks to work.

Use the spinner at the right for Exercises 12–14.



- What is the probability of the arrow stopping on a consonant or one of the first 4 letters of the alphabet?
- What is the probability of the arrow stopping on “X” on the first spin and “F” on the second spin?
- What is the probability of the arrow stopping on “J” or “A” on one spin?