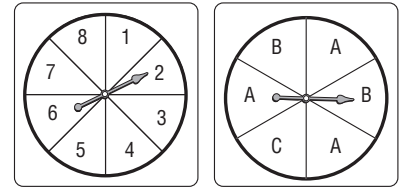


Lesson 7 Homework Practice

Independent and Dependent Events

The two spinners at the right are spun. Find each probability.

1. $P(4 \text{ and } C)$
2. $P(1 \text{ and } A)$
3. $P(\text{even and } C)$
4. $P(\text{odd and } A)$
5. $P(\text{greater than } 3 \text{ and } B)$
6. $P(\text{less than } 5 \text{ and } B)$



GAMES There are 10 yellow, 6 green, 9 orange, and 5 red cards in a stack of cards turned facedown. Once a card is selected, it is *not* replaced. Find each probability.

7. $P(\text{two yellow cards})$
8. $P(\text{two green cards})$
9. $P(\text{a yellow card and then a green card})$
10. $P(\text{a red card and then an orange card})$
11. $P(\text{two cards that are not orange})$
12. $P(\text{two cards that are neither red nor green})$
13. **OFFICE SUPPLIES** A store sells a box of highlighters that contains 4 yellow, 3 blue, 2 pink, and 1 green highlighter. What is the probability of randomly picking first 1 blue and then 1 pink highlighter from the box?
14. **BASKETBALL** Angelina makes 70% of her free throws. What is the probability that she will make her next two free throws?

15. **CAR RENTALS** Use the following information and the information in the table.

At a car rental office, 63% of the customers are men and 37% are women.

- a. What is the probability that the next customer will be a woman who requests a convertible?

Car Requests	
Compact	25%
Full-size	37%
Convertible	10%
SUV	16%
Luxury	12%

- b. What is the probability that the next customer will be a man who requests either a compact car or luxury car?

Lesson 7 Problem-Solving Practice

Independent and Dependent Events

<p>1. CHECKERS In a game of checkers, there are 12 red game pieces and 12 black game pieces. Julio is setting up the board to begin playing. What is the probability that the first two checkers he pulls from the box at random will be two red checkers?</p>	<p>2. CHECKERS What is the probability that the first piece is red and the second piece is black? Explain how you found your answer.</p>
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CHESS For Exercises 3–5, use the following information.

Inger keeps her white and black chess pieces in separate bags. For each color, there are 8 pawns, 2 rooks, 2 bishops, 2 knights, 1 queen, and 1 king.

<p>3. Are the events of drawing a knight from the bag of white pieces and drawing a pawn from the bag of black pieces <i>dependent</i> or <i>independent</i> events? Explain. Find the probability of this compound event.</p>	<p>4. Are the events of drawing a bishop from the bag of white pieces and then drawing the queen from the same bag <i>dependent</i> or <i>independent</i> events? Explain. Find the probability of this compound event.</p>
<p>5. Find the probability of drawing a pawn, a knight, and another pawn from the bag of white pieces.</p>	<p>6. SOCCER During a soccer season, Mario made approximately 2 goal points for every 5 of his shots on goal. What is the probability that Mario would make 2 goal points on two shots in a row during the season?</p>