- 33. **CHALLENGE** Determine whether the following statement is *true* or *false*. If the statement is false, provide a counterexample.

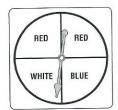
  If two events are independent, then the probability of both events is less than 1.
- 34. **WRITING IN MATH** Compare and contrast independent events and dependent events.

# PRACTICE

- **35.** Jeremy tossed 5 coins. What is the probability that each coin landed on tails?
  - **A**  $\frac{1}{10}$
  - **B**  $\frac{1}{25}$
  - **C**  $\frac{1}{32}$
  - $D \frac{1}{64}$

**36.** The spinners below are each spun once.





What is the probability of spinning 2 and white?

- $\mathbf{F} = \frac{1}{16}$
- $H^{\frac{2}{5}}$
- $G \frac{1}{4}$
- $J = \frac{3}{5}$

## Spiral Review

- 37. **GOVERNMENT** Five people are elected to the city council. From those 5 people, how many ways can a 2-person committee be chosen? (Lesson 8-3)
- **38. SPORTS** There are 10 players on a softball team. How many ways can a coach pick the first 3 batters? (Lesson 8-2)

Find the volume of each solid described. Round to the nearest tenth if necessary. (Lessons 7-5 and 7-6)

- 39. rectangular pyramid: length, 14 m; width, 12 m; height 7 m
- 40. cone: diameter, 22 cm; height, 24 cm
- **41**. Graph polygon *ABCDE* with vertices A(-5, -3), B(-2, 1), C(-3, 4), D(0, 2), and E(0, -3). Then graph the image of the figure after a reflection over the *y*-axis and write the coordinates of its vertices. (Lesson 6-5)

### GET READY for the Next Lesson

PREREQUISITE SKILL Write each fraction in simplest form.

- 42.  $\frac{52}{120}$
- 43.  $\frac{33}{90}$

44.  $\frac{49}{70}$ 

45.  $\frac{24}{88}$ 



**29**. A school cafeteria offers sandwiches with three types of meat and two types of bread. Which table shows all possible sandwich combinations available?

A	Bread	Meat
	White	Ham
	Wheat	Turkey
	White	Ham
	Wheat	Turkey

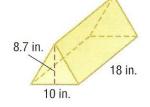
Bread	f Meat
White	Ham
White	Turkey
White	Beef
Whea	t Ham
Whea	t Turkey
Whea	t Beef

Bread	Meat
White	Ham
White	Turkey
White	Beef
Wheat	Ham
Wheat	Turkey
Wheat	Beef
Rye	Ham
Rye	Turkey
Rye	Beef

Bread	Meat
White	Ham
White	Turkey
White	Beef
White	Bologna
Wheat	Ham
Wheat	Turkey
Wheat	Beef
Wheat	Bologna

Spiral Review

**30.** The regular prisms at the right are similar. Find the volume of the smaller prism. Round to the nearest tenth. (Lesson 7-9)





Find the lateral area and the surface area of each regular pyramid. Round to the nearest tenth. (Lesson 7-8)

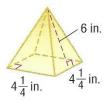


10.2 cm 9 cm 7.8 cm





33.



34. **INTERNET** The number of U.S. households with high-speed Internet access increased 66% between 2003 and 2004. If 63 million households had high-speed Internet access in 2004, what was the number of households with high-speed Internet access in 2003? (Lesson 5-8)

#### GET READY for the Next Lesson

**PREREQUISITE SKILL** Evaluate n(n-1)(n-2)(n-3) for each value of n. (Lesson 1-2)

**35.** 
$$n = 5$$

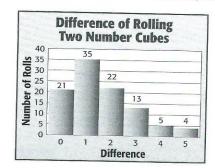
**36.** 
$$n = 10$$

37. 
$$n = 12$$

38. 
$$n = 8$$

# TEST PRACTICE

23. Two number cubes are rolled and the difference is recorded. The graph shows the results of several rolls.



Based on past results, what is the probability that the difference is 2?

- **A**  $\frac{7}{20}$
- $C \frac{11}{50}$
- **B**  $\frac{1}{20}$
- $D \frac{1}{25}$

**24.** Shannon spun the spinner shown and recorded her results.



Number on Spinner	Frequency
1	20
2	10
3	2
4	40
5	8

What is the experimental probability of landing on the number five?

- $\mathbf{F} \quad \frac{1}{10}$
- $\mathbf{H} \frac{3}{10}$
- $\mathbf{G} \frac{1}{5}$
- $J = \frac{2}{5}$

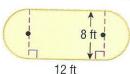
## **Spiral Review**

A jar contains 3 red marbles, 4 green marbles, and 5 blue marbles. Once a marble is selected, it is not replaced. Find each probability. (Lesson 8-4)

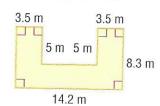
- 25. 2 green marbles
- 26. a blue marble and then a red marble
- 27. **FOOD** Pepperoni, mushrooms, onions, and green peppers can be added to a basic cheese pizza. How many 2-item pizzas can be prepared? (Lesson 8-3)

Find the area of each figure. Round to the nearest tenth. (Lesson 7-2)

28.



29



30. **SAVINGS** Shala's savings account earned \$4.56 in 6 months at a simple interest rate of 4.75%. How much was in her account at the beginning of that 6-month period? (Lesson 5-9)

### GET READY for the Next Lesson

31. **PREREQUISITE SKILL** Lawanda was assigned some math exercises for homework. She answered half of them in study period. After school, she answered 7 more exercises. If she still has 11 exercises to complete, how many exercises were assigned? Use the *work backward* strategy. (Lesson 1-8)