Practice B

5-7 Multiplying Fractions

Multiply. Write each answer in simplest form.

1.
$$\frac{1}{2} \cdot \frac{2}{5}$$

2.
$$\frac{1}{3} \cdot \frac{7}{8}$$

3.
$$\frac{2}{3} \cdot \frac{4}{6}$$

4.
$$\frac{1}{4} \cdot \frac{10}{11}$$

5.
$$\frac{3}{5} \cdot \frac{2}{3}$$

6.
$$\frac{8}{9} \cdot \frac{3}{4}$$

7.
$$\frac{3}{8} \cdot \frac{4}{5}$$

8.
$$\frac{2}{7} \cdot \frac{3}{4}$$

9.
$$\frac{1}{6} \cdot \frac{2}{3}$$

Evaluate the expression $x \cdot \frac{1}{5}$ for each value of x. Write the answer in simplest form.

10.
$$x = \frac{3}{7}$$

11.
$$x = \frac{5}{6}$$

12.
$$x = \frac{2}{3}$$

13.
$$x = \frac{10}{11}$$

14.
$$x = \frac{5}{8}$$

15.
$$x = \frac{4}{5}$$

- **16.** A cookie recipe calls for $\frac{2}{3}$ cup of brown sugar. Sarah is making $\frac{1}{4}$ of the recipe. How much brown sugar will she need?
- 17. Nancy spent $\frac{7}{8}$ hour working out at the gym. She spent $\frac{5}{7}$ of that time lifting weights. What fraction of an hour did she spend lifting weights?

LESSON Practice A

5-7 Multiplying Fractions

Multiply. Write each answer in simplest form.

1.
$$\frac{1}{2} \cdot \frac{1}{7}$$

2.
$$\frac{1}{4} \cdot \frac{1}{4}$$

3.
$$\frac{1}{5} \cdot \frac{1}{3}$$

4.
$$\frac{2}{3} \cdot \frac{1}{3}$$

5.
$$\frac{2}{3} \cdot \frac{2}{7}$$

6.
$$\frac{1}{4} \cdot \frac{1}{5}$$

7.
$$\frac{1}{3} \cdot \frac{2}{5}$$

8.
$$\frac{1}{4} \cdot \frac{2}{3}$$

9.
$$\frac{1}{3} \cdot \frac{1}{3}$$

Evaluate the expression $x \cdot \frac{1}{2}$ for each value of x. Write the answer in simplest form.

10.
$$x = \frac{1}{2}$$

11.
$$x = \frac{1}{3}$$

12.
$$x = \frac{1}{4}$$

13.
$$x = \frac{1}{5}$$

14.
$$x = \frac{2}{3}$$

15.
$$x = \frac{3}{4}$$

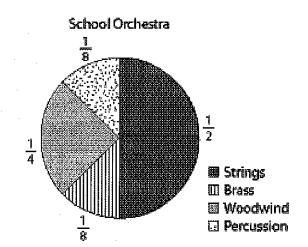
- **16.** In Mr. Sanders's class, $\frac{1}{3}$ of the students are girls. About $\frac{1}{4}$ of the girls want to join the chorus. What fraction of all the students in Mr. Sanders's class want to join the chorus?
- 17. A recipe for trail mix calls for $\frac{3}{4}$ pound of peanuts. Luiza only wants to make half of the recipe's servings. How many pounds of peanuts should she use?

TLESSON Problem Solving

Multiplying Fractions

Use the circle graph to answer the questions. Write each answer in simplest form.

- 1. Of the students playing stringed instruments, $\frac{3}{4}$ play the violin. What fraction of the whole orchestra is violin players?
- 2. Of the students playing woodwind instruments, $\frac{1}{2}$ play the clarinet. What fraction of the whole orchestra is clarinet players?



Circle the letter of the correct answer.

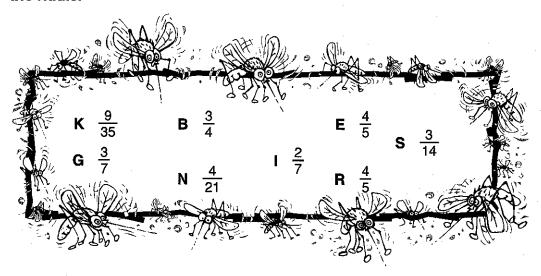
- 3. Two-thirds of the students who play a percussion instrument are boys. What fraction of the musicians in the orchestra is boys who play percussion? girls who play percussion?
 - A $\frac{1}{24}$ of the orchestra
 - $\mathbf{B} \frac{1}{12}$ of the orchestra
 - $\mathbf{C} \stackrel{1}{=} \mathbf{of}$ the orchestra
 - $D \frac{2}{3}$ of the orchestra
- 5. There are 40 students in the orchestra. How many students play either percussion or brass instruments?
 - A 5 students
 - **B** 10 students
 - C 8 students
 - D 16 students

- 4. The brass section is evenly divided into horns, trumpets, trombones, and tubas. What fraction of the whole orchestra do players of each of those brass instruments make up?
 - $\mathbf{F} = \frac{1}{32}$ of the orchestra
 - $G \frac{1}{8}$ of the orchestra
 - $H \frac{1}{4}$ of the orchestra
 - $\mathbf{J} = \frac{1}{2}$ of the orchestra
- 6. If 2 more violinists join the orchestra, what fraction of all the musicians would play a stringed instrument?

Puzzles, Twisters & Teasers

5-7 Itchy Multiplication

Solve each problem and find the answer in the box. Place the letter corresponding to the answer in the blanks to answer the riddle.



Find the value of each expression if $n = \frac{3}{7}$.

- 1. The value of $\frac{4}{9}n$
- **2.** The value of $\frac{2}{3}n$
- 3. The value of $\frac{3}{5}n$
- **4.** The value of $\frac{1}{2}n$

What is a mosquito's favorite sport? ____ _ _ _ DIVING