

LESSON
5-7 **Practice B**
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. $\frac{1}{2} \cdot \frac{1}{7}$ $\frac{1}{14}$	2. $\frac{1}{4} \cdot \frac{1}{4}$ $\frac{1}{16}$	3. $\frac{1}{5} \cdot \frac{1}{3}$ $\frac{1}{15}$
4. $\frac{2}{3} \cdot \frac{1}{3}$ $\frac{2}{9}$	5. $\frac{2}{3} \cdot \frac{2}{7}$ $\frac{4}{21}$	6. $\frac{1}{4} \cdot \frac{1}{5}$ $\frac{1}{20}$
7. $\frac{1}{3} \cdot \frac{2}{5}$ $\frac{2}{15}$	8. $\frac{1}{4} \cdot \frac{2}{3}$ $\frac{1}{6}$	9. $\frac{1}{3} \cdot \frac{1}{3}$ $\frac{1}{9}$

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

10. $x = \frac{1}{2}$ $\frac{1}{4}$	11. $x = \frac{1}{3}$ $\frac{1}{6}$	12. $x = \frac{1}{4}$ $\frac{1}{8}$
13. $x = \frac{1}{5}$ $\frac{1}{10}$	14. $x = \frac{2}{3}$ $\frac{1}{3}$	15. $x = \frac{3}{4}$ $\frac{3}{8}$

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?

$\frac{1}{12}$ of the students

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?

$\frac{3}{8}$ pound

LESSON **Practice B**
5-7 **Multiplying Fractions**

Multiply. Write each answer in simplest form.

1. $\frac{1}{2} \cdot \frac{2}{5}$ $\frac{1}{5}$	2. $\frac{1}{3} \cdot \frac{7}{8}$ $\frac{7}{24}$	3. $\frac{2}{3} \cdot \frac{4}{6}$ $\frac{4}{9}$
4. $\frac{1}{4} \cdot \frac{10}{11}$ $\frac{5}{22}$	5. $\frac{3}{5} \cdot \frac{2}{3}$ $\frac{2}{5}$	6. $\frac{8}{9} \cdot \frac{3}{4}$ $\frac{2}{3}$
7. $\frac{3}{8} \cdot \frac{4}{5}$ $\frac{3}{10}$	8. $\frac{2}{7} \cdot \frac{3}{4}$ $\frac{3}{14}$	9. $\frac{1}{6} \cdot \frac{2}{3}$ $\frac{1}{9}$

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

10. $x = \frac{3}{7}$ $\frac{3}{35}$	11. $x = \frac{5}{6}$ $\frac{1}{6}$	12. $x = \frac{2}{3}$ $\frac{2}{15}$
13. $x = \frac{10}{11}$ $\frac{2}{11}$	14. $x = \frac{5}{8}$ $\frac{1}{8}$	15. $x = \frac{4}{5}$ $\frac{4}{25}$

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?

$\frac{1}{6}$ cup

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?

$\frac{5}{8}$ hour

LESSON **Practice C**
5-7 **Multiplying Fractions**

Multiply. Write each answer in simplest form.

1. $\frac{3}{8} \cdot \frac{4}{5}$ $\frac{3}{10}$	2. $\frac{5}{8} \cdot \frac{3}{9}$ $\frac{5}{24}$	3. $\frac{6}{7} \cdot \frac{5}{6}$ $\frac{5}{7}$
4. $\frac{8}{9} \cdot \frac{9}{11}$ $\frac{8}{11}$	5. $\frac{5}{12} \cdot \frac{6}{7}$ $\frac{5}{14}$	6. $\frac{7}{9} \cdot \frac{3}{8}$ $\frac{7}{24}$
7. $\frac{14}{15} \cdot \frac{5}{7}$ $\frac{2}{3}$	8. $\frac{7}{8} \cdot \frac{2}{9}$ $\frac{7}{36}$	9. $\frac{4}{5} \cdot \frac{7}{9} \cdot \frac{1}{7}$ $\frac{4}{45}$

Evaluate the expression $x \cdot \frac{2}{7}$ for each value of x . Write the answer in simplest form.

10. $x = \frac{4}{5}$ $\frac{8}{35}$	11. $x = \frac{7}{8}$ $\frac{1}{4}$	12. $x = \frac{7}{11}$ $\frac{2}{11}$
13. $x = \frac{11}{10}$ $\frac{11}{35}$	14. $x = \frac{8}{9}$ $\frac{16}{63}$	15. $x = \frac{21}{30}$ $\frac{1}{5}$

Compare. Write $<$, $>$, or $=$.

16. $\frac{5}{6} \cdot \frac{3}{4} \square \frac{7}{8} \cdot \frac{4}{5}$	17. $\frac{2}{3} \cdot \frac{6}{7} \square \frac{9}{10} \cdot \frac{1}{3}$	18. $\frac{10}{12} \cdot \frac{5}{6} \square \frac{5}{9} \cdot \frac{1}{4}$
19. $\frac{7}{9} \cdot \frac{3}{4} \square \frac{7}{6} \cdot \frac{1}{2}$	20. $\frac{9}{11} \cdot \frac{1}{2} \square \frac{1}{6} \cdot \frac{3}{11}$	21. $\frac{2}{3} \cdot \frac{9}{10} \square \frac{4}{5} \cdot \frac{7}{8}$

22. Cara bought 1 yard of velvet at the fabric store. She used $\frac{5}{9}$ yard to make a purse. Then she used $\frac{1}{2}$ of the leftover velvet to make a hair band. How much of the velvet did she use to make the hair band?

$\frac{2}{9}$ yard

23. A square-shaped park measures $\frac{3}{5}$ mile long on each side. What is the area of the park?

$\frac{9}{25}$ square mile

LESSON **Reteach**
5-7 **Multiplying Fractions**

To multiply fractions, multiply the numerators and multiply the denominators.

When multiplying fractions, you can sometimes divide by the GCF to make the problem simpler.

You can divide by the GCF even if the numerator and denominator of the same fraction have a common factor.

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

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

The problem is now $\frac{1}{1} \cdot \frac{1}{3}$.

$$\frac{1 \cdot 1}{1 \cdot 3} = \frac{1}{3}$$

So, $\frac{1}{2} \cdot \frac{2}{3} = \frac{1}{3}$

Is it possible to simplify before you multiply?
If so, what is the GCF?

1. $\frac{1}{4} \cdot \frac{1}{2}$ no	2. $\frac{1}{6} \cdot \frac{3}{4}$ yes; 3	3. $\frac{1}{8} \cdot \frac{2}{3}$ yes; 2	4. $\frac{1}{3} \cdot \frac{2}{5}$ no
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Multiply.

5. $\frac{1}{6} \cdot \frac{3}{5}$ $\frac{1}{10}$	6. $\frac{1}{4} \cdot \frac{1}{3}$ $\frac{1}{12}$	7. $\frac{7}{8} \cdot \frac{4}{5}$ $\frac{7}{10}$	8. $\frac{1}{6} \cdot \frac{2}{3}$ $\frac{1}{9}$
9. $\frac{1}{5} \cdot \frac{1}{2}$ $\frac{1}{10}$	10. $\frac{3}{5} \cdot \frac{1}{4}$ $\frac{3}{20}$	11. $\frac{3}{7} \cdot \frac{1}{9}$ $\frac{1}{21}$	12. $\frac{3}{4} \cdot \frac{1}{2}$ $\frac{3}{8}$
13. $\frac{1}{3} \cdot \frac{6}{7}$ $\frac{2}{7}$	14. $\frac{1}{4} \cdot \frac{2}{3}$ $\frac{1}{6}$	15. $\frac{3}{4} \cdot \frac{1}{3}$ $\frac{1}{4}$	16. $\frac{1}{4} \cdot \frac{1}{8}$ $\frac{1}{32}$