2.1

Multiplying Fractions

Simplifying Fractions

Put the fractions in simplest terms.

1) $\frac{12}{15}$

3) $\frac{36}{72}$

2) $\frac{18}{60}$

Different ways to Multiply

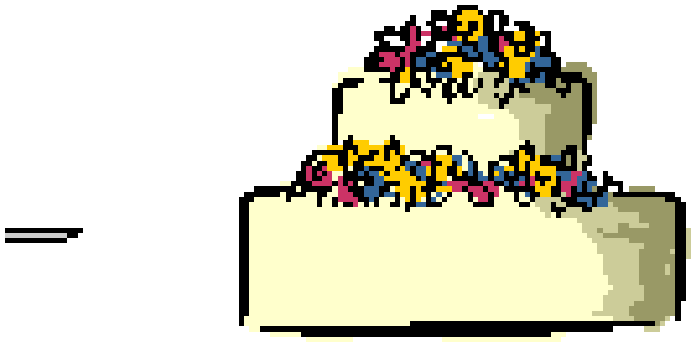
5×4 $5 \cdot 4$

$5(4)$ $(5)(4)$

Times You Would Multiply a Fraction Times a Fraction

- Your family eats ¼ of ½ of what's left of a birthday cake.

¼ of ½ or ¼ x ½



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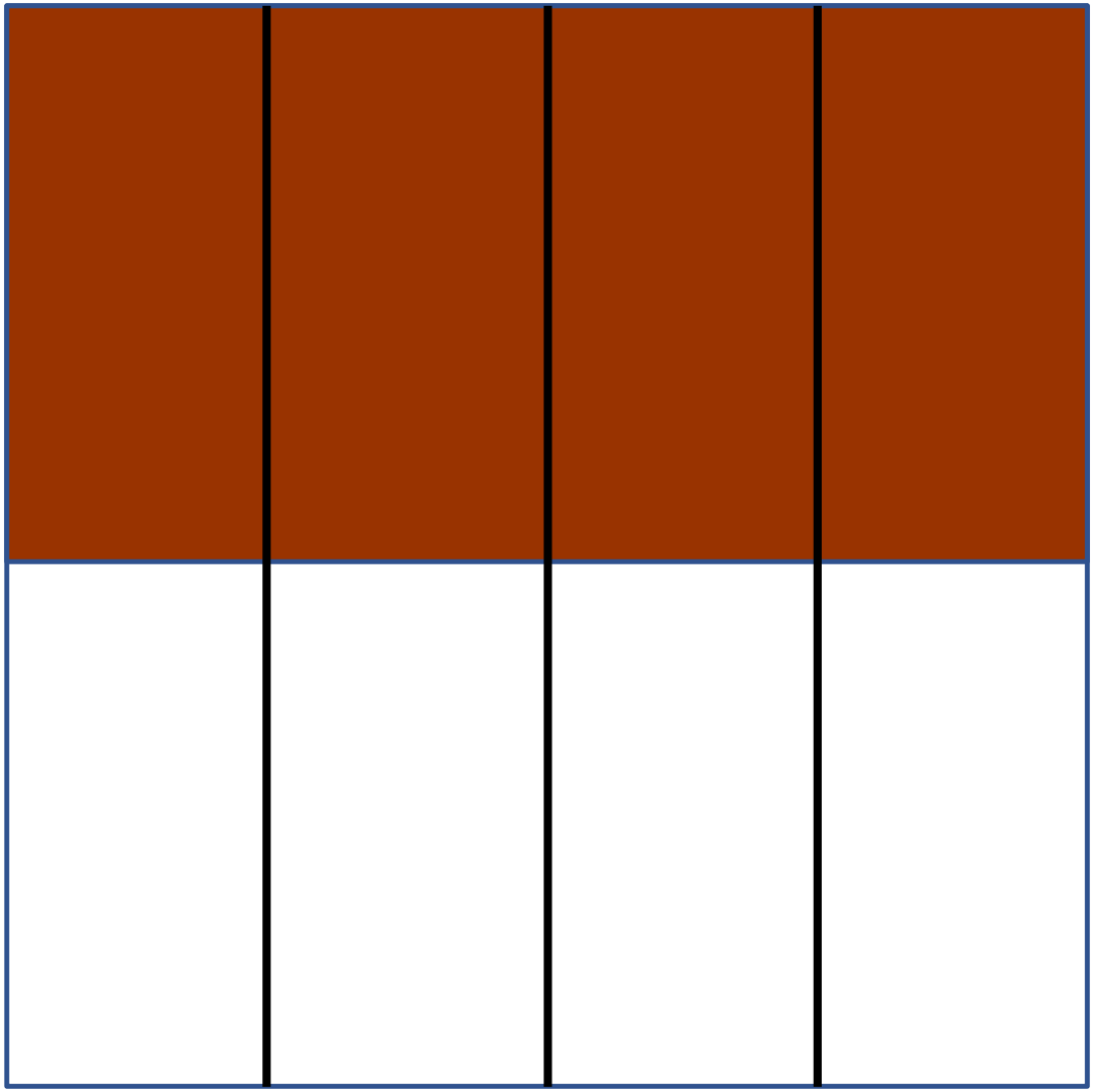
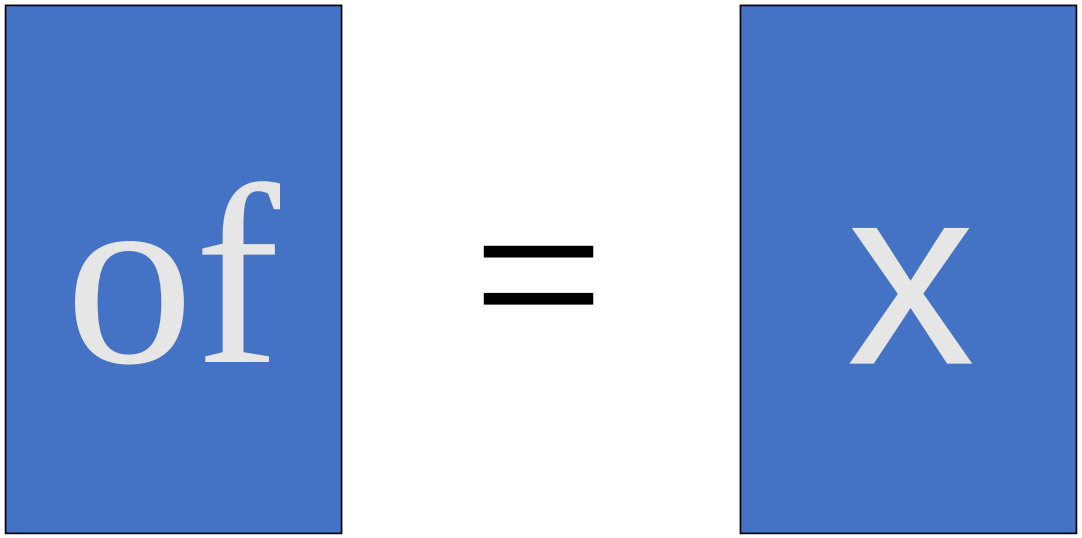


How to Find a Fraction of a Fraction

The first thing to remember is “of” means multiply in mathematics.



Practice

1) $\frac{1}{3} \times \frac{5}{6} =$

2) $\frac{1}{4} \times \frac{7}{9} =$

3) $\frac{5}{7} \times \frac{2}{3} =$

4) $\frac{3}{7} \times \frac{2}{3} =$

Multiply and then simplify

$$a) \quad \frac{2}{3} \bullet \frac{3}{4} =$$

Multiply and then simplify

b) $\frac{15}{20} \times \frac{4}{10} =$

Cross-simplify and then multiply

c) $\frac{2}{3} \bullet \frac{3}{4} =$

Multiply and then simplify

$$d) \quad \frac{15}{20} \times \frac{4}{10} =$$

Practice

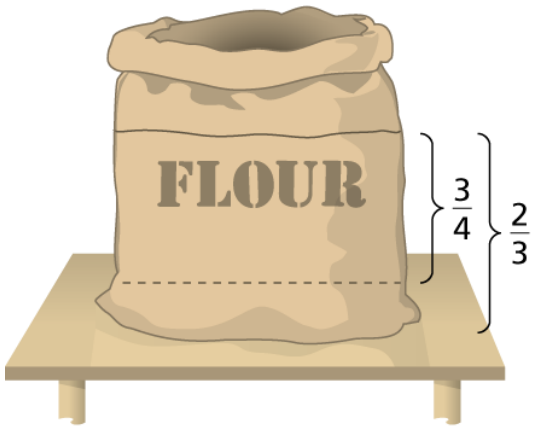
1) $\frac{7}{16} \times \frac{6}{7} =$

3) $\frac{8}{11} \times \frac{11}{20} =$

2) $\frac{15}{16} \times \frac{8}{20} =$

4) $\frac{4}{9} \times \frac{15}{22} =$

Real-life Application



You have $\frac{2}{3}$ of a bag of flour. You use $\frac{3}{4}$ of the flour to make empanada dough. How much of the entire bag do you use to make the dough?

Real-life Application

You have $\frac{5}{8}$ of a large bottle of shampoo.

You pour $\frac{3}{10}$ of the shampoo into a smaller bottle. How much of the entire larger bottle did you pour into the smaller bottle?

Extension

e) $\frac{2}{3} \times \frac{3}{40} \times \frac{5}{6} =$

Application

You reserve $\frac{2}{5}$ of the seats on a tour bus. You are able to fill $\frac{5}{8}$ of the seats you reserve. What fraction of the seats on the bus are you able to fill?

Multiplying Mixed Numbers

1) $1\frac{1}{3} \bullet 3\frac{3}{4} =$

Multiplying Mixed Numbers

2) $3\frac{1}{3} \bullet 4\frac{2}{5} =$

Multiplying Mixed Numbers

$$3) \quad \frac{3}{5} \bullet 45 =$$

Practice

4) $6\frac{1}{3} \times \frac{3}{4} =$

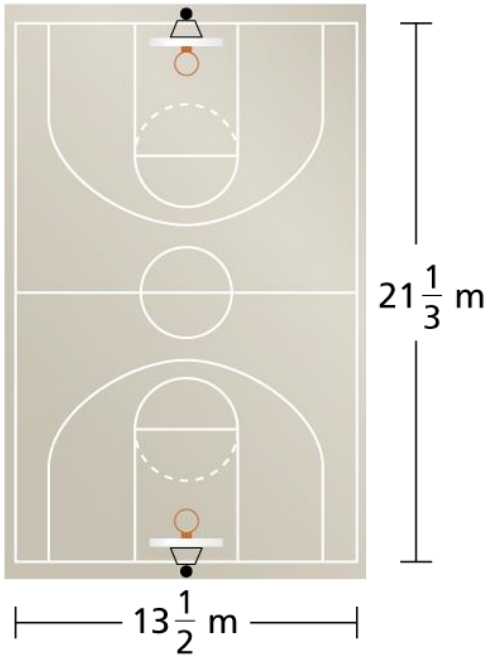
Practice

5) $\frac{1}{2} \times 2\frac{3}{4} =$

Practice

6) $1\frac{7}{8} \times 2\frac{2}{5} =$

Real-life Application



A city is resurfacing a basketball court. Find the area of the court.