

## Multiplying Fractions

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YouTube Video Link: <https://youtu.be/FJ6O9bj9yCA>

### Lesson Overview

In this lesson, students will learn the process that is needed in order to multiply fractions. Students will use a graphic organizer to record their learning about multiplying fractions and apply the process to sample problems. This lesson is a review of multiplying fractions in preparation to learn how to divide fractions.

### Standards Addressed

- SCCCR-M 6.NS.1      Compute and represent quotients of positive fractions, using a variety of procedures (e.g., visual models, equations, and real-world situations).
- CCSS-M 6.NS.1      Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

### Disciplinary Literacy Best Practices

Graphic Organizer  
Exit Ticket

### Lesson Plan

Time Required – One 50 minute class period

Disciplinary Vocabulary – multiply, fractions, analyze, numerator, denominator, simplify

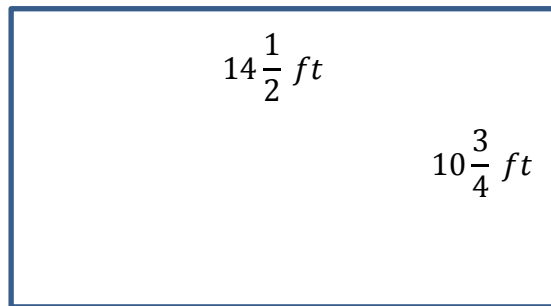
Materials Needed:

- Copies of graphic organizer (1 per student)
- Colored pencils
- Student Interactive Notebooks
- Learn Zillion Video: <http://youtu.be/kNDgekqyChs>

Assessment: Exit Tickets

## Engage

- Teacher shows students a blue print of his/her new dream kitchen.



- Task: “How much flooring do I need to replace my kitchen floor?”
- Students explore the task to determine how they might find the total flooring needed for the kitchen remodel. Teacher uses questioning to determine prior knowledge about fraction computation and calculation of area.

## Explore

- Students use colored pencils to complete the four windows of the graphic organizer. Different colors are used for each step of the process for multiplying fractions so they can easily refer to the steps by color.
- After completing the graphic organizer, students will fold the graphic organizer and glue it into their interactive notebooks.

## Explain

- Teacher models the process of multiplying fractions using the steps identified in the graphic organizer.
- Students view a Learn Zillion video (<http://youtu.be/kNDgekqyChs>) of worked examples of multiplying fractions.
- Teacher models several examples of the multiplication process for fractions for students, referring to the steps listed in the graphic organizer.
- Students practice the process of multiplying fractions independently.

Exit Ticket: Explain the steps for the process of multiplying fractions.

### **Teacher Reflections and Biographical Information**

This lesson was a success 96% of the class mastered the objective. The song was great for the auditory learner. The graphic organizer was a must for the visual learners and making it a foldable to paste into the interactive notebook met the needs of kinesthetic learners.

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Divide  
Fractions

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Divide  
Mixed  
Numbers

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Multiply  
and Divide  
Fractions  
and  
Mixed  
Numbers

Multiply  
Fractions

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Multiply  
Mixed  
Numbers

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get common denominators.

- \_\_\_\_\_
- \_\_\_\_\_, if possible.
- \_\_\_\_\_ the numerator by the numerator and \_\_\_\_\_ denominator by denominator.
- \_\_\_\_\_, if possible.

### Example

$$\frac{3}{4} \cdot \frac{6}{15}$$

### Example

$$\frac{3}{8} \div \frac{9}{12}$$

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get common denominators.

- \_\_\_\_\_
- \_\_\_\_\_, then multiply.
- \_\_\_\_\_, if possible.
- \_\_\_\_\_ the numerator by the numerator and \_\_\_\_\_ denominator by denominator.
- \_\_\_\_\_, if possible.

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get common denominators.

- *Change to improper fractions.*
- \_\_\_\_\_
- \_\_\_\_\_, if possible.
- \_\_\_\_\_ the numerator by the numerator and \_\_\_\_\_ denominator by denominator.
- \_\_\_\_\_, if possible.

### Example

$$2\frac{4}{5} \cdot 3\frac{4}{7}$$

### Example

$$4\frac{2}{3} \div 2\frac{4}{9}$$

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get common denominators.

- *Change to improper fractions.*
- \_\_\_\_\_
- \_\_\_\_\_, then multiply.
- \_\_\_\_\_, if possible.
- Follow the steps for multiplication.
- \_\_\_\_\_, if possible.