

Fraction Mini Series: Lesson 3

Multiplying and Dividing Fractions

Rationale: Believe it or not...multiplying and dividing fractions are actually the easiest of the fraction operations. So don't worry if you're struggling with them, we'll get this fixed together right away!

I hope you're ready to become your inner fraction ninja because once you've learned these skills you're going to unlock powers you never knew you had. One thing is very important though...at almost every step ask yourself "Do I understand what just happened?" It's in the moments where you say "No" that we need to focus.

This lesson: Within this lesson we are going to focus on four main topics:

1. How is multiplying two fractions similar to multiplying a fraction by a whole number?
2. How can I quickly multiply to fractions accurately?
3. How is dividing two fractions as easy as dividing two whole numbers?
4. What is a reciprocal and how can I use it to divide fractions quickly?

Lesson Sequence: We'll start with a couple of videos. In the first video, you'll look at multiplication of fractions. In the second video you'll look at the division of fractions. Please feel free to rewind or fast forward as much as you want. This is learning on your time, at your pace, in short ... it's all about you!

[Video One: Multiplying Fractions](#)

[Video Two: Dividing Fractions](#)

BAM...Peanut Butter Jam, feel better? If not give it another go.

The next step for us is to see whether or not you truly have mastery of these concepts. To do this we are going to hit up the most revolutionary educational site in recent times ... Khan Academy. This is like the equivalent of Buckley's cough syrup for math ... no matter what you think of it, it works!

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On the site you're about to visit there are 6 activities you should complete. There are suggestions for mastery goals found at the top of the screen and there is a scratch pad option that allows you to work on the page you're viewing. If that's not enough, there are hints and example videos found to the right of the workspace.

The screenshot shows the Khan Academy interface for the activity "Adding fractions with unlike denominators". The top navigation bar includes the Khan Academy logo, the subject "Pre-algebra", and a search bar. The left sidebar lists various topics, with "Adding fractions with unlike denominators" highlighted. The main workspace features a scratchpad with a drawing toolbar and the equation $\frac{1}{6} + \frac{1}{4} = ?$. The scratchpad contains the handwritten text "MATH!". To the right, the "Answer" section has a "Check Answer" button, a "Show me how" section with an "I'd like a hint" button, and a "Stuck? Watch a video" section with a video player and the title "Example of adding fraction". Hand-drawn blue callouts point to the "Topics" menu, the "Hide scratchpad" button, the "Hint" button, and the "Video Examples" section.

[Activity 1: Multiplying Fractions by Whole Numbers](#)

[Activity 2: Multiplying Fractions](#)

[Activity 3: Multiplying Positive and Negative Fractions](#)

[Activity 4: Dividing Fractions by Fractions](#)

[Activity 5: Dividing Fractions](#)

[Activity 6: Dividing Positive and Negative Fractions](#)

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What Else Do You Need To Know?:

In this section, you can provide up to five questions you have about the material. Write them on this lesson or just email them to your teacher. If you're feeling brave, tweet them out to friends ...see if they know!

	What's up?
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	

Show me what you know!

Alright, we've made it. Now it's time to demonstrate your understanding and create something that might help others along the way. I want you to create a piece that shows me you now know this material. That same piece should be designed to help others who would have trouble just like you did earlier. The only thing I ask, if you've done one of these lessons before, please try something new!

The piece can be any format you like, provided that it communicates your understanding, and can be used to help others having similar struggles.

Some suggested formats are:

Screencast

Show Me Composition

Weebly or Blog Site

PowerPoint / Prezi

Poster

NearPod Lesson

A song/Poem

When you've finished it, come see me and we'll talk about ways, if you're comfortable, to share it.