

Algebra Mini Series: Lesson 3

The Importance of Zero and One

Rationale: *OK, so algebra has been causing some issues. In this lesson you're going to the heart of the matter. You're going to look at how two numbers play a huge role in understanding how to solve for variables.*

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 two main topics:*

- 1. What is the importance of zero?*
- 2. What is the importance of one?*

Lesson Sequence: *Let's look at two very short videos to answer these questions. In the first video, you'll look at what how you can use the idea of 'creating zero' to undo addition and subtraction. In the second video, you'll look at how you can 'create one' to undo multiplication and division.*

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 1: The importance of zero](#)

[Video 2: The importance of one](#)

Crazy eh? Just those two numbers having such an impact on solving linear equations. Well I hope you're feeling better about solving some equations now. It's time for us to practice.

On the sites you're about to visit there are a variety of explanations and practice. Please try all of the practice problems from the 4 activities.

On the Khan Academy resource, 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.

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Algebra Mini Series: Lesson 2 Evaluation ... A Closer Look

The image shows a screenshot of the Khan Academy website interface. The main content area is titled "Adding fractions with unlike denominators" and includes a scratchpad where the equation $\frac{1}{6} + \frac{1}{4} = ?$ is displayed. The scratchpad contains the handwritten text "MATH!". The interface includes a sidebar with a "Topics" cloud, a "Hint" cloud, and a "Video Examples" cloud. The "Video Examples" cloud points to a video titled "Example of adding fraction". The "Hint" cloud points to the "I'd like a hint" button. The "Activate Scratchpad to write on the screen!" cloud points to the scratchpad area. The "Topics" cloud points to the sidebar menu.

[Activity 1: One Step equations with + and - \(Algebra Lab\)](#)

[Activity 2: One Step equations with * and ÷ \(Hot Math\)](#)

[Activity 3: One Step equations with + and - \(Khan Academy\)](#)

[Activity 4: One Step equations with * and ÷ \(Khan Academy\)](#)

If the Order of Operations (BEDMAS) is causing issues... check this out:

<https://www.khanacademy.org/math/pre-algebra/order-ofoperations/order-of-operations/v/introduction-to-order-of-operations>

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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.