Why Use DragginMath?

Learning algebra is the biggest intellectual leap most people ever attempt. DragginMath is a helpful stepping stone across that chasm.

1) As a tool for thinking, traditional mathematical notation works pretty well… *once you understand how to read it.* **Until you understand it, traditional notation is an obstacle that many people never get over.**

DragginMath converts notation into interactive pictures. These simple diagrams make the meaning of the notation clear. You can immediately see: "*When I <u>write</u> **this**, it <u>means</u> **that**.*"

2) The way we traditionally teach evaluation doesn't work very well… *even if you understand it.* **And many people never understand it well even though it has been taught this way for a long time.**

Computer Scientists discovered a simpler way of evaluating back in the 1960s, but somehow Math Education never found out about it. In DragginMath, you will see this simpler technique working right before your eyes, step by step, every time you enter an expression. People often say "*Yes, but there's not much going on there.*" And that's the point.

3) The way we write transformations works pretty well on paper… *once you understand the rules.* **Until you understand the rules, this kind of presentation is another obstacle that many people never get over.**

Algebraic solutions are written on paper one line after another. Beginners often can't see which parts on one line transform into which other parts on the next line. With DragginMath, you can immediately see: "*When I <u>do</u> **this** with **these**, they <u>become</u> **that**.*" And you can undo and redo to watch each step *in motion* as many times as you like with the click of a button.

4) You don't have to wait through a homework cycle to find out if what you did is correct.

You can use DragginMath to check your work on paper, or as an engine of discovery: learn by just fooling around. Either way, you will find out if you were right **right now**. The app does the work, but you must tell it **what work to do**. And if you ask it to do something that doesn't follow the rules of algebra, DragginMath quietly and harmlessly doesn't do it. Think of it as a padded playground with a supervisor that is helpful but not annoying.

5) This is your easy demonstration and homework tool.

Just connect your iPad to a classroom video projector and start DragginMath. When you want to introduce a new algebraic property, you can show your students: "*It <u>looks</u> like **this**, and it <u>works</u> like **that**.*" Then make animated demonstrations just by using the app as you normally would. Add annotations and homework problems, then email them to your students *all within the app*.