

Welcome to today's MLTI Minute.

Today I would like to show you Grapher. It's in the Utilities Folder it also could be on your Dock.

I'm going to start with the 2D graph today and click Choose. This opens the program. Also up here you have the menu bar which I suggest that you go through and you look at all the options because some of these things up here might be very valuable to what you would like to do with Grapher. And here are the examples. I'm going to go down to Bessel Functions and I'm just going to open up the first example and here it is and it fills my graph.

Each one of these equations is a different color. If I highlight the equation the equation that I have highlighted comes to the front and is darker. The rest of the equations get a little darker. If I wanted to uncheck that equation those lines would go away. There they are still on there and if I would like to open it up and see what each one of these lines is I can. If I want to uncheck one of them that one would disappear.

So this is basically Bessel functions on a graph. If I would like to view this is 3-D I can go under the View menu click Switch to 3-D. And it takes a second or two to rez it up. All of a sudden you are going to see as soon as you finish rezzing, apparently this is a lot of stuff. You can actually see this is that equation set in 3 dimensional format. This is really huge when you're trying to explain an abstract concept such as math to kids who have real tactile needs or real visual needs. This they can manipulate. They can turn it, they can twist it. They can look at it and go "wow that's what that means". So this is a great little tool for that. I am going to go back to my 2D view at this point.

There is an Inspector here is that you can use. So if I did click on something the Inspector would open up and it would show me my line thickness and my line color and I can change those things if I like.

Also right here you have an Equation Pallet so here you can use any of these to help make your equation. If I say Show the Equation Pallet it pulls it up. Here are your Symbols, and there's Greek, and there's Operators, and there's Standard. So you could write any equation that you can basically think of. Once you've written an equation it's very easy to move the equation from here to a work sheet that you'd like to create. If I just take this equation, and I hover my cursor over it, push Control and then click I can use this little menu that comes up and I can say Copy As. And you have a bunch of choices here of how you want to copy it. A real easy one is to choose the PDF version and then go to Pages. Open up at a blank Pages document. and you can just paste the equation in.

If you would like the equation to remain in line you can leave it the way it is. Go back get the next equation and do the same thing. Copy AS PDF. Come back to your Pages and then pasted it in again. If you'd like to make these bigger you can simply drag the corner and they grow bigger and smaller. Right now they're set in line but if I open the Inspector in Pages I can click on the third thing over which is Object Placement and I can call it Floating. and making it Floating means that I can basically move it anywhere I want to move it on my page.

So here is Grapher. Hope you enjoyed this minute.