There are several options for producing clear, easy-to-read equations in eCollege. Which option is right for you will depend on a number of factors, including how complex the equations are, whether or not they need to be in line with other alphabetic text, and your comfort with various Math coding languages like MathML and LaTeX. You can choose one of the following options for creating your equations:

1. Basic- Use the built-in eCollege Equation editor for basic equations and problems that don’t have a text component.

2. Intermediate- Use MathType software to build complex equations and paste the MathML Code into the eCollege Equation Editor to be rendered into a .gif.

3. Advanced- Code complex equations in LaTeX and use MathJax script and CDN (servers) to render code in eCollege page as individual symbols, resulting in the ability to display equations as stand-alone objects or in line with text in word problems.

This is the Intermediate Process guide. For best results, always enter equations that require the use of the eCollege Equation Editor while using Internet Explorer, for PC, or Firefox for Mac.

Using MathType and MathML

The intermediate option for equation creation and editing uses software called MathType. MathType is a more advanced, robust editor than the eCollege Equation Editor, and equations built inside the editor can be copied as MathML or LaTeX code for use in the eCollege environment. MathML and LaTeX are coded languages that help produce neat, clear equations in a web environment, making it easier to arrange symbols, numbers, and variables in a cohesive format. The process for using MathType to integrate equations into eCollege is fairly straightforward, and gives the instructor more control over the look and organization of the final product.
To begin using MathType, download the software and open the editor. It will look like this:

Input your equation using your keyboard, the buttons on the editor toolbar, or the Math Input Panel, which can be accessed from the Edit menu. Once your equation is built, it should look like this:

\[ a^2 + b^2 = c^2 \]
To transfer this equation to eCollege, first you must be able to copy the equation into MathML. Go to the “Preferences” menu and select these settings: “MathML 2.0 (no namespace)” and “Include MathType Data in translation.” Hit OK.

Now, when you highlight and copy the equation in the MathType editor, you’ll actually be copying the MathML code for this equation. Go back to eCollege and open the eCollege Equation Editor again. This time, once you are in the “Create New Equation” screen, hit “Show MathML” at the bottom of the editor.
Next, you’ll see an editor window with the beginnings of a MathML code in it. MathML looks very much like standard HTML or XML, with coded tags that communicate specific instructions to the editor.

Highlight and erase this information, and then hit Paste, or Ctrl+V. This will paste your copied MathML from MathType into the editor window. Once the code is pasted in, hit “Show Editor.”
Selecting “Show Editor” will allow you to check your code, as the equation should show up momentarily in the editor window, just as it did in MathType. From here, you can press “Save and Insert.”

Once your changes are saved, you can switch to Course view and see your equation within the eCollege course item.

Accessibility

The Faculty Center supports the University’s mission to ensure all online materials are produced to meet accessibility accommodation standards. The current recommendation for ensuring all students are able to access equations built with the eCollege equation editor or rendered using
LaTeX and MathJax is for instructors to write out all equations in text format within the visual editor so that they may easily be read by screenreading software. Additionally, instructors may choose to create short audio clips using Camtasia or other recording software, and embed them along with the visual equations. This will allow students of all abilities to access either a visual or audio cue, or both.