

Decomposing Mathematics

Post-Secondary STEM Lesson

Overview	<ul style="list-style-type: none">• Students will use Squareleaf.net to decompose a chosen mathematical process in order to explain the procedure to the rest of the classroom.
Objectives	<ul style="list-style-type: none">• Following the lesson, students will be able to:<ul style="list-style-type: none">○ Utilize Squareleaf in an efficient manner.○ Effectively explain the process that goes into a mathematical equation.○ Describe each step of a math equation and why the stage is necessary to accurately compute the answer.• Allow students to delve deeper into an equation for increased understanding of the process.• After completing these objectives, the students will be asked to evaluate the other students' presentations with the guidelines set before them.
Standards	<ul style="list-style-type: none">• No post-secondary standards available
Materials	<ul style="list-style-type: none">• Computer connected to the Internet• Math textbook
Procedures	<ul style="list-style-type: none">• Before beginning the activity, students should:<ul style="list-style-type: none">○ Choose an equation from the math textbook that they will be able to break into at least six steps○ Discuss with other students and the professor whether their equation seems plausible to work with• After determining what their equation is, each student will access Squareleaf.net and create an outline of the processes within the equation.• Each process will be in a different color than the one directly before or after it in order to ease the transition between the separate processes.• The layout of the outline must be in an organized fashion that can easily be understood by the other students.• After creating the entire decomposition and printing off a multiple copies to pass around, the students will introduce their equation to the class in a five-minute presentation or evaluate their peers.
Evaluation	<ul style="list-style-type: none">• The students will be graded according to the neatness and clarity of their decomposition as well as the effectiveness of their presentation.• They will also have a completion grade as well for their assessment of their classmates.