

<p><b>Describe at least one "take-away" from the response data (i.e., something that may help you to better serve your students).</b></p>	<p><b>What did you find most surprising from the other teacher responses in last week's Google Form?</b></p>
<p>Understanding that other teachers are seeing the same issues I do and finding other resources to teach literal equations.</p>	<p>They have the same issues I am having with my students.</p>
<p>More time needs to be spent on operations with rational numbers.</p>	<p>That we all did not have the same type of responses for conceptual understanding.</p>
<p>Understanding the different ways a student may struggle in this subject.</p>	<p>It was more refreshing than surprising, seeing the responses from the teachers as they reevaluated different ways to instruct the students rather than place the blame on the students. Just the goal to constantly find ways to teach and reach our students.</p>
<p>Students need to understand how to solve literal equations and how to rearrange equations.</p>	<p>That many teachers also agree students have trouble recalling basic math facts.</p>
<p>I found the comment about breaking up the material into smaller portions and including manipulatives if possible to be a good reminder.</p>	<p>I thought it was surprising that students "seem to become confused when trying to identify the point of intersection" after graphing lines using the slope-intercept formula.</p>

In which of the following categories is 8.EE.7 included?	In your own words, what does it mean for a standard to be a "major" standard?	What component(s) of rigor are assigned to 8.EE.7?	What do the component(s) of rigor tell you about this standard?
Major Standard	The majority of the time should be spent on helping students reach proficient in this standard. This standard will help them with other standards and other grades.	Conceptual Understanding, Procedural Skill and Fluency	The students should be able to understand, interpret, and solve the equations for this standard.
Major Standard	The standard is ranked as high importance and will be given a lots of attention during testing.	Conceptual Understanding, Procedural Skill and Fluency	At this level the students should master the standard.
Major Standard	It's a standard that is necessary in the growth of the student's overall knowledge and success in that subject. It's the ground work for the standards that follow.	Conceptual Understanding, Procedural Skill and Fluency	It's the ground work for the standards that follow and the students' understanding is crucial to the next steps.
Major Standard	Greater focus on that math standard; critical areas of learning; Major Point value (30 points) on testing	Conceptual Understanding, Procedural Skill and Fluency	Both components will be tested within that 1 standard
Major Standard	It's part of the main focus for this grade level. Students must know these concepts to be able to move on.	Conceptual Understanding, Procedural Skill and Fluency	Students need to understand the meaning and they need to be able to work problems with a degree of ease and accuracy.

In which of the following categories is 8.EE.8 included?	What component(s) of rigor are assigned to 8.EE.8?	What do the components of rigor tell you about this standard?	Describe what it means for a student to conceptually understand 8.G.1.
Major Standard	Conceptual Understanding, Procedural Skill and Fluency, Application	The student should be able to understand, analyze and solve system of equations and real-world problems using system of equations.	They should be able to look at the problem and interpret what rotations, reflections and translations mean. They should also be able to interpret the movement of a shape with these words.
Major Standard	Conceptual Understanding, Procedural Skill and Fluency, Application	At this level students should master the standard.	Students should have a full understanding of the properties and how they relate to one another.
Supporting Standard	Conceptual Understanding, Procedural Skill and Fluency, Application	Because this standard is broken up into many concepts, this standard can test a student's conceptual understanding, fluency, application and skill.	It's knowing more than just the facts and steps, it's fulling understanding the process and idea of a concept. So a student needs to be able to use their knowledge of the idea of a concept to solve the problems and tasks given. They will need this in order to rotate, properly reflect an image across an axis themselves and identify and differentiate them all.
Major Standard	Conceptual Understanding, Procedural Skill and Fluency, Application	Students will be tested on all 3 types of questions: - application - written arguments, critique of reasoning - modeling in math	Students must interpret and justify their reasoning (explain why or why not or how) using math concepts.
Major Standard	Conceptual Understanding, Procedural Skill and Fluency, Application	For this standard, students need to be able to understand it, work it, and apply it.	Although the term used is "conceptually," I believe that, for a student to grasp this concept, it should be presented first in terms of hands-on activities to help students internalize the ideas being presented, along the order of concrete-representational-conceptual. I like that the standard aptly includes the word "experimentally."

Describe what it means for a student to conceptually understand 8.G.2.	Describe what it means for a student to conceptually understand 8.G.3.	Please provide any other comments you have at this time. Your input (positive or negative) is greatly appreciated!
<p>The students should be able to recognize if one shape is congruent with another due to a sequence of transformations.</p>	<p>The student should be able to interpret the effects of the different transformations a two-dimensional figures goes through using a coordinate plane.</p>	<p>I need more helping finding ways to teach them but still keep up with the pacing.</p>
<p>Students have a full understanding or be able to use mathematical reasoning to describe how images obtain congruency.</p>	<p>Student should be able to use mathematical reasoning to conclude that they all create similar images.</p>	
<p>Again the student needs to be able to use their knowledge of the idea of a concept to solve the problems and tasks given. They have to be able to take the original shape and make a second shape that is equal. conceptual understanding is crucial to complete these tasks.</p>	<p>These are all sub-standards of the same and they all relate, so the answer and importance in each are all the same.</p>	
<p>Explain using a series of motion statements and/or words describing how one figure can map onto another figure using transformations which proves the 2-D figures are congruent.</p>	<p>Students must know that coordinate points on dilated images will increase or decrease by multiplication (of rational numbers) whereas rotated and reflected coordinate points will "rearrange" depending on how a figure is rotated or reflected.</p>	<p>Thanks for sending these PD questionnaires out. They really make us plan for upcoming units.</p>
<p>To me, this means that the student can "visualize" the two-dimensional figure moving around on a Cartesian Coordinate grid. It means that the student can grasp that although a shape has moved around in some manner, it is still the same shape. It also means that the procedures for fluency for this skill are not as important at the 8th-grade level of understanding as they will be in, for example, high school geometry. Instead, my work as a math teacher on this concept is to help prepare students for higher-level work by giving them experiential knowledge that transforms into a basic understanding which they can build on as needed.</p>	<p>By its nature, this standard seems to require a more in-depth understanding. Students need to be able to apply their knowledge of coordinate location somewhat fluently to be able to succeed in describing the effect of the various movements of figures.</p>	<p>I was thankful to get the input from fellow teachers. I sincerely desire to learn from and to share with other math teachers, so that fills a felt need. Other teachers have so much knowledge just from having experienced the teaching themselves, and their solutions can be just what is needed to reach my own students. Thank you for doing this for us!</p>