

**TASK 3: ASSESSMENT COMMENTARY**

Respond to the prompts below (**no more than 10 single-spaced pages, including prompts**) by typing your responses within the brackets following each prompt. Do not delete or alter the prompts. Commentary pages exceeding the maximum will not be scored. Attach the assessment you used to evaluate student performance (**no more than 5 additional pages**) to the end of this file. If you submit a student work sample or feedback as a video or audio clip and you or your focus students cannot be clearly heard, attach a transcription of the inaudible comments (**no more than 2 additional pages**) to the end of this file. These pages do not count toward your page total.

**1. Analyzing Student Learning**

- a. Identify the specific learning objectives measured by the assessment you chose for analysis.

[The objectives measured in this assessment are: calculate the maximum and minimum lengths, in whole numbers, of a triangle's side given the measurements for two sides and assess whether three given values can be used to form a triangle (Lesson One), prove whether a triangle, given the side lengths, is acute, right, or obtuse, using the Converse Pythagorean Theorem (Lesson Two), and use Triangle Congruence Theorems to analyze a pair of triangles and determine which specific criteria establishes congruence (Lesson Three). ]

- b. Provide a graphic (table or chart) or narrative that summarizes student learning for your whole class. Be sure to summarize student learning for all evaluation criteria submitted in Assessment Task 3, Part D.

[My field school utilizes mastery grading, so scores are given on a discrete scale from 0-4. Zero is equivalent to an F, and 4 is equivalent to an A. The average score of my students is a 2.36, which is a C. The standard deviation is 1.3, about one level of mastery, and the number of students assessed is 22. Overall, students performed the best on problem one, earning an average score of 3.13, which is a B. Students struggled the most on problem five, earning an average score of 1.77, which is a high D. About 9% of the class did not attempt problems one and two, giving these problems the highest attempt rates. Problems five and six have the lowest attempt rates, with about 40% of the class leaving these problems blank.

**Problem One:** Fourteen students (63.6%) were able to explain that the given three values cannot form a triangle because the sum of 7 and 14 is equal to 21. Two students solved the problem using an incorrect process. Three students used the correct process, but had an incomplete or inaccurate explanation.

**Problem Two:** Nine students (41%) were able to create equations that demonstrated that the minimum value of a triangle formed with 5 and 9 is 5 and the maximum value is 13. Four students (18%) presented the correct answer with no calculations, and six students (27.3%) used a partially correct solution process and presented an incorrect answer.

**Problem Three:** Eleven students (50%) were able to correctly square all the given values, compare the sum of the squares of the two smaller values with the third, and conclude that the triangle was acute. Two students (9%) presented an answer with no calculations, and three students answered that the triangle was obtuse (13.6%).

**Problem Four:** Twelve students (54.5%) were able to determine the first pair of triangles were congruent because they shared two congruent angles and an included side (ASA), and that the second pair of triangles were congruent because they shared two congruent angles and a non-included side (AAS). Four students (18%) incorrectly determined that both pairs were congruent because of ASA.

**Problem Five:** Ten students (45.5%) were able to list three values and prove that the triangle formed by these values would be acute. They proved this by squaring the two smaller values

and comparing the sum to the square of the largest value. Three students created an acute triangle, but did not correctly prove that it was acute or provided an incomplete proof.

**Problem Six:** Twelve students (45.5%) were able to explain that the friend knows that the two triangles are congruent because their corresponding sides are congruent (SSS). There was one incomplete response.

Class Performance: 22 Students			
	Problem	Average Score	
	1	3.17	
	2	2.52	
	3	2.82	
	4	2.61	
	5	1.77	
	6	2.45	
			Grade Earned
			Number of Students
			0
			1
			2
			3
			4
			5

  

Unattempted Problems		
Problem Number	Students Who Did Not Attempt	Percentage of Class
1	2	9.1%
2	2	9.1%
3	3	13.6%
4	3	13.6%
5	9	40.1%
6	9	40.1%

]

- c. Use evidence found in the **3 student work samples and the whole class summary** to analyze the patterns of learning **for the whole class** and differences for groups or individual learners relative to
- conceptual understanding,
  - procedural fluency, **AND**
  - mathematical reasoning and/or problem-solving skills.

Consider what students understand and do well, and where they continue to struggle (e.g., preconceptions, common errors, common struggles, confusions, and/or need for greater challenge).

[Fourteen students (63.6%) were able to explain that the three values given in problem one could not form a triangle because the sum of 7 and 14 is equal to 21. This explanation shows a fairly strong conceptual understanding of the Triangle Inequality Theorem and how it can be used to determine if three values can form a triangle. These students demonstrated procedural fluency with the computations used for the theorem, and mathematical reasoning by justifying and explaining their answers.

Twelve students (54.5%) were also able to identify the correct reason why the pairs of triangles were congruent for problems four and six. This indicates procedural fluency in identifying congruent and corresponding sides and angles. This also indicates the ability to apply Triangle Congruence Theorems and use them to solve problems, which demonstrates conceptual understanding and problem-solving skills.

Eleven students (50%) were able use the Converse Pythagorean Theorem to determine that the triangle was acute in problem three. This demonstrates problem-solving skills because the solution method was not given to the students in advance. This also demonstrates procedural fluency in squaring values and writing inequalities.

The most common error on this exam was identifying the reason for congruence for the two triangles in problem 4b as ASA, rather than AAS. This error was found in four students' assessments, or 18% of the class. Focus Student #2 makes this error. This error demonstrates a lack of conceptual understanding of the definition of an *included* side. This statement is confirmed by the fact that these four students were able to correctly identify the reason for congruence for problem 4a as ASA. They understand that the triangles are congruent when two of the corresponding angles and one corresponding side are congruent, but not the difference between *included* and *non-included* sides.

Another common error was students neglecting to create a triangle for problem five, and simply listing three values instead. This error occurs in five students' assessments, or about 22.7% of the class. Focus Student #1 makes this error. Focus Student #2 draws an acute triangle, but does not label the measurements of the sides. He lists the values of the sides next to the triangle, and does not indicate which value corresponds with which side. This error demonstrates a lack of problem-solving skills; students who make this error do not properly interpret the meaning of "create" or do not closely read the problem's instructions. In not labeling the sides of the triangle, Focus Student #2 demonstrates a lack of conceptual understanding of geometrical models: diagrams require mathematical precision and must be labeled accordingly. One confusion on this assessment was attempting to complete a problem by using the incorrect problem-solving strategy. This demonstrates a lack of conceptual understanding of theorems involving triangles, and how each theorem lends itself to a category of procedures. For problem one, two students attempt to prove that the three values cannot create a triangle by squaring the sides and comparing the sum of the two smaller squares to the larger square. These students are using the procedure related to the Converse Pythagorean Theorem to solve a problem related to the Triangle Inequality Theorem. Another student attempts to classify the triangle in problem three by summing two of the sides together and testing if the sum is greater than the third side. This student is using the procedure related to the Triangle Inequality Theorem, for a problem related to the Converse Pythagorean Theorem. This may also indicate a lack of appropriate problem-solving skills, as well as the ability to read problems and correctly interpret what the problem requires.

A lack of appropriate problem-solving skills may be the reason why problems five and six were left blank by almost half the class. These two problems ask higher level DOK questions (create,

explain), and require a more in-depth understanding of the theorems involving triangles and how to apply them.

Students who do not write comprehensive explanations of their solutions in complete sentences are not demonstrating rigorous mathematical reasoning (Kilpatrick et al., 2001, p. 139). This pattern occurs in 10 assessments (45.5%), including Focus Student #1 (problem four). It is more likely that most of these students are able to write their answers in complete sentences, but do not want to expend the mental effort to do so or simply forget. Evidence to support this statement comes from my observations of students; when I ask them to explain their answers, most of them are able to do so easily and comprehensively.

Squaring numbers continues to be a struggle for a few students. This error occurs in three students' assessments (13.6%), including Focus Student #2 (problem three). This student writes "4 = 8," which demonstrates a lack of conceptual understanding of squared numbers. Even though this student was able to correctly square 15 and 15.5, he is still grappling with the fact that squaring numbers does not equate to multiplying them by two. There also may be a difficulty with the syntax of squared numbers, since he does not actually write any of the exponents in problem three. When he does write the exponents in problem five ( $9^2$ ,  $10^2$ ,  $11^2$ ), he does not compute the squares. This indicates a lack of procedural fluency, as well as how to interpret the syntax of a squared number and compute it using a calculator. ]

- d. If a video or audio work sample occurs in a group context (e.g., discussion), provide the name of the clip and clearly describe how the scorer can identify the focus student(s) (e.g., position, physical description) whose work is portrayed.

[Does not apply ]

## 2. Feedback to Guide Further Learning

Refer to specific evidence of submitted feedback to support your explanations.

- a. Identify the format in which you submitted your evidence of feedback for the 3 focus students. **(Delete choices that do not apply.)**
- Written directly on work samples or in separate documents that were provided to the focus students

If a video or audio clip of feedback occurs in a group context (e.g., discussion), clearly describe how the scorer can identify the focus student (e.g., position, physical description) who is being given feedback.

[Does not apply]

- b. Explain how feedback provided to the 3 focus students addresses their individual strengths and needs relative to the learning objectives measured.

[Focus Student #1 (my underperforming learner) correctly identified the reason why the two pairs of triangles were congruent (ASA & AAS) for problem four. However, since this problem was completed only because I guided her through it during class time, I did not provide any positive feedback. I reminded her that she needed to write a sentence in order to explain her answer, and provided her with a sentence frame: "The triangles are congruent because..." Because this student did not answer problem six, which was on the same topic as problem four, I wrote "How are these two problems related?", with an arrow pointing at both problems. This question was meant to help this student draw connections between the two problems, and realize that they both require Triangle Congruence Theorems to solve. Focus Student #1 did not complete problems 1-3. I suggest a strategy to help this student by commenting "Do you have notes? Maybe use them during the exam." Students are allowed to use notes on exams for a

maximum grade of a C. If this student uses the examples of problems that she has in her notebook to help her on the assessment, she might be able to better demonstrate her knowledge of the learning objectives.

Focus Student #2 (an RFEP student struggling with basic reading comprehension) was able to explain why the two triangles in problem six were congruent “they are both SSS making it congruent.” I wrote “excellent!” on his paper to demonstrate that he met the learning objective for this question. Because this student wrote that 4 squared equals 8 in problem three, I wrote “ $4^2 = 8$ ?  $4 \times 4$  is...” This provides the student with a different representation of  $4^2$ , which may help him realize his computation error. Because this student wrote “the triangle formed is a obtuse due to it being greater than  $90^\circ$ ”, I wrote “not correct reason. We aren’t given angles?!” This statement is meant to develop the student’s mathematical reasoning because points out the logical flaw in his explanation. Because this student wrote “Both sides of triangles are unaffected and stay ASA making them the same” for problem four, I wrote “both ASA? What is the difference btwn ASA & AAS?” I circled a non-included side on problem 4b and wrote “is this side included?” This is meant to help the student develop understanding of the difference between ASA and AAS congruence. On problem five, Focus Student #2 draws an acute triangle and writes “ $9^2$ ,  $10^2$ ,  $11^2$ . It’s acute because none of the sides or angles are over  $90^\circ$ .”

Underneath the squared numbers, I wrote, “What do we do next?  $11^2 = \underline{\quad} \times \underline{\quad}$ ”. I provide this equation frame using  $11^2$  and two blanks because it looks similar to a previous assignment that my students completed before this learning segment. It is meant to activate his background knowledge on how to compute squared numbers. Next to his explanation, I wrote “angles? We have side measurements, not angles.” This is meant to develop my student’s understanding of why the Converse Pythagorean Theorem is used to classify triangles, particularly ones that do not have given angle measurements.

For problem one, Focus Student #3 (a GATE learner) wrote “These values cannot form a  $\Delta$  because when I did the three tests I got false meaning the values cannot form a  $\Delta$ .” I underlined the words “three tests” and wrote “yes” next to her answer. I wrote this because this student was struggling with this learning objective during the lesson, but was able to demonstrate understanding and procedural fluency on this assessment. I aimed to affirm her success on this problem. For problem five, this student squared the values of 8, 9, and 10, and found that the sum of  $8^2$  and  $9^2$  is greater than  $10^2$ . She concluded that these values form an acute triangle. I underlined the word “create” from the question, drew a triangle and labeled the sides with her chosen values, and wrote “show me you know what a  $\Delta$  formed w/ 8, 9, 10 would look like.” I wrote this because the criteria for this problem was to create an acute triangle and label the sides. Additionally, creating a triangle helps develop conceptual understanding of types of triangles and how classifying them is connected to the Converse Pythagorean Theorem.]

- c. Describe how you will support each focus student to understand and use this feedback to further their learning related to learning objectives, either within the learning segment or at a later time.

[Focus Student #1 struggled with all three learning objectives. To support her in understanding the feedback I provided her asking how problems four and six were related, I will conduct an activity with the class where I present problems about various topics covered in class so far. I will have my students decide which theorems/problem-solving strategies can be used to solve the problems and explain how they know without actually solving each problem. I will then present a graphic organizer containing a list of theorems and the key elements and/or visuals that are used to identify that the problem requires this theorem. I will also individually go over her notes with her and review key ideas by referencing the activity we did for each lesson.

Focus Student #2 was able to explain why the three values in problem one were not able to form a triangle. To build upon this strength, I will use his answer for this problem as an example of how he can answer future problems. For example, when he asks me how he should write his



explanation to a problem, I will tell him to answer similarly to the way he did for problem one. This student was able to identify why the triangles in problems 4a and six were congruent, but not problem 4b. To help him understand the feedback I provided him, I will conduct a review session on Triangle Congruence Theorems where students discuss the difference between ASA and AAS. I will have them create their own pairs of triangles that are congruent because of each of the four criteria. Focus Student #2 also struggled with squaring numbers in problems three and five. To support him in using the feedback I provided, I will assign additional practice problems on squaring numbers. This practice will require students to write the multiplication form of the squared number ( $a \times a$ ) before computing the square using a calculator. Focus Student #2 had difficulty explaining why the Converse Pythagorean Theorem proves that a triangle is acute, right, or obtuse. To support this student in understanding my feedback, I will present the class with triangles that have given angle measurements but no side measurements, triangles with given side measurements but no angle measurements, and triangles that have both side and angle measurements. I will ask the students to identify what information is given about the triangles and what information is not given. I will then ask them how we can classify the triangles based on the information given.

Focus Student #3 did well on all of the learning objectives. To help her understand her strengths, I will have my students self-reflect on this lesson segment by providing them a table of the lesson's learning goals and having them rate their understanding of each goal from a scale of 0 (no understanding) to 4 (can teach to someone else). This should help my student recognize that she is proficient in the learning objectives and help build her mathematical confidence. In order to extend her understanding of the Triangle Theorems, I will present the class with rigorous practice problems that require the use of multiple triangle theorems in order to solve (ex. use congruent triangle theorems to find the missing side length of a triangle, and then classify it using the Converse Pythagorean Theorem). This will help my students understand how the theorems are interconnected, as well as develop their problem-solving skills. I will support this student in using my feedback about creating a triangle (problem five), by presenting problems where the best way to solve them is to create visuals, as well as emphasizing creating visuals as an important problem-solving strategy.]

### 3. Evidence of Language Understanding and Use

When responding to the prompt below, use concrete examples from the clip(s) and/or student work samples as evidence. Evidence from the clip(s) may focus on one or more students.

You may provide evidence of students' language use **from ONE, TWO, OR ALL THREE of the following sources:**

1. Use the video clip(s) from Instruction Task 2 and provide time-stamp references for evidence of language use.
2. Submit an additional video file named "Language Use" of no more than 5 minutes in length and cite language use (this can be footage of one or more students' language use). Submit the clip in Assessment Task 3, Part B.
3. Use the student work samples analyzed in Assessment Task 3 and cite language use.

- a. Explain and provide concrete examples for the extent to which your students were able to use or struggled to use the

- selected language function,
- vocabulary and/or symbols, **AND**
- mathematical precision, discourse, or syntax

to develop content understandings.

[The selected language function was: *prove* that triangle is acute, obtuse, or right using the Converse Pythagorean Theorem (Lesson Two). In the “Language Use” video file, I assisted two students, one of whom is an RFEP learner, with problem one of *Classifying Triangles*. The students in this video were able to explain some of the procedures used to classify a triangle given its side lengths. They were able to describe the first step of squaring each side length: “I think you told us to multiply it (the side lengths) two times” (00:20). They were able to correctly label each side of the triangle using  $a$ ,  $b$ , and  $c$  (00:37). They were able to compare the sum of the squares of  $a$  and  $b$  to the square of  $c$ : “They’re equal though” (01:15). As for vocabulary, the students were able to define a right triangle in terms of its angles, “One angle’s at least 90 degrees” (01:51). They demonstrated mathematical discourse by asking whether the triangle in problem one was a scalene triangle (02:05).

The two students in this video struggled to use the mathematical procedures related to the Converse Pythagorean Theorem to draw conclusions about the triangle type. When I asked one of the students, “So why is it a right triangle?”, he answered, “Because this number ( $c^2$ ) is bigger than these ( $a^2$  and  $b^2$ )?” (03:17). This is not the correct answer, as  $a^2 + b^2$  is equal to  $c^2$  for any right triangle. These two students do not demonstrate the ability to use the academic vocabulary (squared/squaring) to describe the mathematical operation they performed on the triangle’s sides (00:30). They also struggled with using the vocabulary *acute*, *right*, and *obtuse* to classify triangles (03:12). For mathematical discourse, these students struggled with using phrases such as “larger than” and “smaller than” to describe the sum of squares for an acute and obtuse triangle (04:18).

Overall, these students demonstrated the ability to use mathematical language to explain some of the procedure in proving whether a triangle is acute, right, or obtuse using the Converse Pythagorean Theorem. However, they had difficulty articulating the importance of this procedure, describing the steps involved in the process, and classifying triangles with the appropriate vocabulary.

On the summative assessment, Focus Student #2 (an RFEP learner struggling with basic reading comprehension skills) was able to use vocabulary to classify the triangle from problem three as obtuse. He was able to use the squared symbol ( $^2$ ) to illustrate the operation he needed to perform on the triangle’s lengths in problem five. Like the students in the “Language Use” clip, this student was able to label each side of the triangle with the appropriate letters ( $a$ ,  $b$ , and  $c$ ). These two examples demonstrate some understanding of academic vocabulary, the ability to use mathematical symbols and syntax, and partial understanding of the language function. For mathematical discourse, this student demonstrated use of conjunctions (*because*, *due to*) in order to build his mathematical proofs in problems three and five.

Although Focus Student #2 correctly concluded that the triangle in problem three was obtuse, his proof focused on the definition of an obtuse triangle rather than the Converse Pythagorean Theorem. He struggled with academic vocabulary in problem five, describing the triangle as acute because “none of the sides or angles are over 90°”, when he should have only been referring to the angle measurements. He wrote a sentence for problem three that is similarly inaccurate: “The triangle formed is an obtuse due to it being over 90°”. He does not specify whether “it” is referring to the sides of angles (or both) of the triangle, and does not use the

degree symbol after “90”. This student did not demonstrate the ability to use inequality symbols to represent his conclusions in problems three and five.

Overall, this student was able to use some vocabulary, discourse, and mathematical symbols to partially execute the language function. However, he struggled with precisely defining mathematical terms and using inequality symbols in his proofs. ]

#### 4. Using Assessment to Inform Instruction

- a. Based on your analysis of student learning presented in prompts 1b–c, describe next steps for instruction to impact student learning:

- For the whole class
- For the 3 focus students and other individuals/groups with specific needs

Consider the variety of learners in your class who may require different strategies/support (e.g., students with IEPs or 504 plans, English language learners, struggling readers, underperforming students or those with gaps in academic knowledge, and/or gifted students needing greater support or challenge).

[The next unit for this class is right triangle trigonometry, which includes using sine, cosine, and tangent to calculate the sides and angles of right triangles. This next unit builds upon this current learning segment because it involves recognizing common patterns between triangles, creating proofs about triangles, and measuring and calculating the angles and sides of triangles. To help my students succeed in this unit, I plan to develop their problem-solving strategies by having them build visual representations of problems and presenting multiple approaches and methods for solving the same problems. Visual representations will aid in my students’ conceptual understanding of how geometric theorems can be expressed numerically, such as the Converse Pythagorean Theorem. Problem-solving strategies will help my students recognize which procedure is used when, which will hopefully reduce errors where the student is attempting to solve a problem by using the process for another topic. I aim to improve my students’ mathematical self-efficacy through peer-teaching methods and collaborative group work. This will hopefully help my students complete their assignments and attempt to solve difficult problems. I will work on building my students’ mathematical vocabulary in order to help them rigorously and comprehensively prove and explain geometric theorems.

A focus on mathematical vocabulary will especially help my RFEP students and those struggling with basic reading comprehension skills. I will use graphic organizers, such as Frayer Models, to help students not only define the vocabulary words, but recognize examples, non-examples, and synonyms. I will not only focus on content-based vocabulary, but also on academic function words, such as prove, justify, classify, and explain. I will link these academic words to non-mathematical topics, and have my students identify examples of using these functions from other subjects and real life. I plan to continue to review basic arithmetic procedures, such as squaring numbers, and using tools such as rulers and protractors to support my students struggling with basic mathematics skills. This will help them succeed in future geometry units. I will continue to support my GATE learners, including Focus Student #3, by providing rigorous and challenging practice problems. Additionally, I will provide opportunities for them to link their mathematical skills to other subjects and their daily lives, such as designing a ramp to create an ADA compliant building entrance (a project that involves the use of trigonometry).

For Focus Student #1, I will focus on developing her mathematical self-efficacy and motivation. I will do this by providing extrinsic motivation, such as stamps, sticks, and praise, as well as building my relationship with this student and finding out what is intrinsically motivating to her. I



also plan on collaborating with my student's other teachers to find out if there are any common patterns in her academic struggles (ei. long word problems). For Focus Student #2, I will build upon his mathematical proficiency by presenting graphic organizers that connect a topic's concepts, procedures, and problem-solving strategies. I will focus on explicitly developing vocabulary and helping him explain his answers using this vocabulary by continuing to provide sentence frames and starters.]

- b. Explain how these next steps follow from your analysis of student learning. Support your explanation with principles from research and/or theory.

[Visual representations are important in supporting students' mathematical learning. Kenney et al. (2005) states, "(drawing) is a device to capture the language of mathematics in order to make it visible to themselves. research students have shown that drawing helps students better understand the material" (p. 71). In providing frequent opportunities for students to create visual representations of mathematical problems, I hope to strengthen their conceptual understanding of geometric principles. Rittle-Johnson et al. (2015) analyzed cognitive science research to study the effect of using multiple methods of solving problems on mathematical learning. The researchers found that "comparing multiple strategies and comparing confusable problem types promote conceptual knowledge, procedural knowledge, and procedural flexibility." This supports my plan to present multiple solution methods. A study by Fülöp (2015) found that explicitly teaching mathematics problem-solving strategies can improve students' conceptual understanding and mathematical knowledge. "It was obvious that if a student did not recognize how to solve the task, knowledge of methods and algorithms is not enough to solve the problem... focusing on problem-solving strategies in upper secondary school will make a difference to students' mathematical knowledge" (p. 49-51). This is why I will make a concerted effort to build my students' problem-solving strategies. I aim to develop mathematical self-efficacy because high mathematical self-efficacy is strongly linked to high mathematical achievement (Al-Hija et al., 2023). Studies by Ramadoni (2022) and Enkosa et al. (2023) demonstrate that peer teaching methods and collaborative group work increase both mathematical self-efficacy and achievement.

My focus on vocabulary development is supported by Amen (2006), who found that direct instruction on mathematical vocabulary helped improve students' confidence, their abilities to understand lessons, discuss ideas in groups, and solve word problems. Frayer Models may be helpful in building understanding of mathematical vocabulary because Kenney et al. (2005) propounds that creating these models help students organize mathematics meaning and concepts (p. 18). This idea is further supported by the Constructivism Learning Theory, which suggests that teachers use multiple modes of representation (Dagar & Yadav, 2016, p. 4). Providing my students with opportunities to connect their mathematical knowledge to other subjects and topics, such as designing an ADA compliant ramp, is in alignment with the Cognitive Learning Theory. This theory states teachers should provide students with ways to transfer their learning from one subject to another (Ormrod & Jones, 2018, p. 291). Projects such as these motivate students because it creates meaningful connections with their everyday lives (Ormrod & Jones, 2018, p. 196).

I plan to use extrinsic rewards to motivate Focus Student #1 because these rewards have been found to help struggling students (Blackburn, 2016, p. 4). Blackburn also emphasizes the importance of building relationships with students and using praise and positive feedback. I plan to collaborate with this student's other teachers because if she is also struggling in other subjects, it may be indicative of factors beyond the scope of mathematics and may require target academic or behavioral support (American Institute for Research, 2024). This is further supported by the fact that this student is failing three additional classes: acting, geography, and English. Graphic organizers that connect a topic's concepts, procedures, and problem-solving strategies will help Focus Student #2 because it will help organize this student's schemas of

mathematics. As Kilpatrick et al. (2001) states, “competence in an area of inquiry depends upon knowledge that is not merely stored but represented mentally and organized (connected and structured) in ways that facilitate appropriate retrieval and application” (p. 117). This student currently has the understanding and ability of many mathematical procedures, and helping him organize this knowledge will push his mathematical ability to the next level.]

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## Appendix

## Scaffolded example for problem 1

Step	Process
1	$7 < \underline{\quad} + \underline{\quad}$ ?    Yes    No
2	$14 < \underline{\quad} + \underline{\quad}$ ?    Yes    No
3	$21 < \underline{\quad} + \underline{\quad}$ ?    Yes    No
4	Are the three equations true?    Yes    No
5	Can we form a triangle with these values?