Exhibit 3.4.e.6

Teacher Work Sample: Impact on Student Learning Sample Evaluation

(Edits completed in *Track Changes*: Rubric attached, page 62 – Candidate re-submitted work after this feedback.)

Teacher Work Sample

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Candidate
Western Connecticut State University
June, 2013

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I. Contextual Factors

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COMMUNITY, DISTRICT AND SCHOOL

From January 2013 to May 2013, I student taught at Bethel Middle School in Bethel, CT. Bethel, CT is a located in northern Fairfield County. Per the town website (http://www.bethel-ct.gov) it has a population of roughly 18,000 people. Neighboring towns are Danbury, Redding, Newtown, and Brookfield. It is the birthplace of PT Barnum and home to the headquarters of Duracell, Cannondale, and Eaton. Demographically, Bethel has a larger percentage of the population claiming Caucasian ancestry than the state average (app. 85% vs. 78%), it has a higher than average high school graduate rate (92% vs. 87%) a lower percentage of citizens living below poverty level (7% vs. 10%) and a slightly lower percentage of households where a language other than English is predominantly spoken (17% vs. 21%). Otherwise, it is about average in terms of citizens holding college degrees, homeownership, median home value, and median household income. (http://quickfacts.census.gov/qfd/states/09/0904790.html) While significantly less urban than its larger neighbor, Danbury, Bethel seems more urban than its other neighbors (Redding, Brookfield and Newtown). In fact, while there isn't much in the demographic data to suggest this, the Bethel School district is finding significant evidence that it should expect an increase in the number of ELL students entering the district. Much behind the scenes discussion has taken place on how best to improve the current structure for English Language Learners to reflect this expected challenge.

The town of Bethel is unique in that schools are all located on a single 140 acre campus called Educational Park. The Town of Bethel school district consists of 3 elementary schools (two are K-3 and one is 4-5), a middle school, and a high school.

The district is served by a nine-member Board of Education whose members are nominated by the political parties and serve four year terms. (Town of bethel Website)

Bethel Schools, in general, have a reputation for being early adaptors of new technologies and instructional practices. The Bethel School district is a BYOT system (bring your own technology). The challenges of such a policy (especially at the middle school level where students' tech savvy-ness far outweighs their self-control) cannot be overstated. Bethel Schools are also implementing of the Charlotte Danielson model, a constructivist teaching framework for planning and instruction, teacher evaluation and mentoring. While I was student teaching, representatives of the Charlotte Danielson group visited the school with administrators in order to evaluate the progress the district has made on its adaptation.

Bethel Middle School scores well on the Connecticut Mastery Tests (CMT)s. In 2012, the 6th grade class (this year's incoming 7th graders) scored 95.5 at or above proficiency in math, 94% in reading, and 91.4% in writing. (http://solutions1.emetric.net/CMTPublic/CMTCode/Report.aspx) All three scores were significantly above the state average. Additionally, Bethel Middle School is labeled a "Spotlight School" from the New England Coalition of Middle Schools. It is one of only 10 Connecticut schools to have this distinction *(Bethel Public Schools Vision Document, October, 2010)*

Bethel Middle School's slogan is Respect and Responsibility. They have a behavioral model they call PBIS which stands for Positive Behavioral Intervention and Supports. It is a 3-tiered approach to student discipline similar to Connecticut's SRBI model for academic intervention and is based on the idea that through specific levels of positive support and reinforcement, students can learn to make better, safer, and more positive behavioral choices.

CLASSROOM FACTORS

Bethel Middle school organizes its students and classrooms in clusters, as is common practice in middle schools. I was in cluster 7A. For technology, my classroom had a Smartboard, 3 IPads, 2 live scribe pens and notebooks, and an apple TV. We also had a television that was never used and served only to take up space. There was a round table with 5 chairs and 24 desks. We had 5 classes that varied in size from 15 students to 30 students. This meant that I was one desk short for the block with 30 students in it if no one was absent. I found the classroom arrangement to be more challenging than I expected. The Smartboard was run from a projector on a cart rather than mounted in the ceiling. This was a bigger problem than one would think as it forced me to have a cart in the middle of the class. If I worked in front of the Smartboard, I would often cast a shadow over the screen. If I worked at the laptop, my back was to the students. In addition, we had two large blackboards situated in such a way that it was not possible to ensure that all students could see both a blackboard and the Smartboard without having to make adjustments with their seating. This presented an easy excuse to tune me out to the students who had problems staying focused and I constantly found myself redirecting them to turn around and look at me as I moved from one medium to the next.

Each block at Bethel Middle School is 40 minutes long, although it was very common to have shortened blocks both planned and unplanned. This seemed to be a point of contention common among all the teachers. Planning for 40 minute lessons only to find out, with less than 48 hours' notice, that the actual class would be anywhere from only 23 – 28 minutes long happened with surprising regularity.

Early implementers of the Common Core curriculum, my cluster was in between textbooks during this period of time. Their previous textbooks series Connected Math Series (copyright 2006) published by Pearson Prentice Hall was not common core aligned. While these lessons were still heavily relied upon in class they were not necessarily given in the order of the series and were supplemented with additional instructional elements from the newly purchased Big Ideas textbooks by Ron Larson. These textbooks were common core aligned and significantly more challenging than the others. The students did not have either of these textbooks in their possession. They were used in Smartboard presentations with appropriate handouts and copies distributed.

INSTRUCTIONAL IMPLICATIONS

The particular class referred to in this work sample is my 2nd block class. Out of 24 students, I had 12 girls and 12 boys. In this class, I had a large portion of students with 504 plans and IEPs. 1 student was an ELL, 7 got extended time (or unlimited time) on tests, 4 had problems staying focused due to a variety of medical conditions (ADHD, recent surgeries, etc.) and required preferential seating, reviewing of directions and additional strategies to ensure they remained on task. For this reason, a special education teacher assisted with this class. 5 of these students participated in extended learning time during the 5th block for all their subjects. I found this fact extremely helpful as it allowed me to provide differentiated strategies for these students in a setting outside of the regular classroom and in a way that didn't make them feel like they were being singled-out in class. Additional note-taking and practice for math was often the focus for this 5th block class.

Although this block had many students requiring specialized instruction, most of them required similar differentiation along the lines of checking in with the students, asking them to restate instructions, giving them more guided instruction, and being careful of seating

arrangements. This simply became the rhythm of the class. (excellent observation) My ELL student, however, presented me with a greater challenge. Conscientious and quiet, she easily disappeared in a class of students with attention and behavior problems. Her "helper" in the class (another Spanish speaking student) was extremely social; often off-task and required differentiated instruction in the form of the 5th block extended learning time as well. Differentiated learning for this ELL often went beyond translated copies to small side conversations with my Google translator, small sketches, and many hand gestures as our lifelines for communication. Amazingly, we seemed to get the job done, but I continue to reflect on how I could have better met her needs. (excellent point!)

This class was my biggest challenge in terms of classroom management. It was also my first class of the day. This was an advantage as I had a chance to ensure all necessary supplies were on their desks when the students entered, but a disadvantage as I couldn't revise my lessons based on the response of other clusters. Just getting everyone seated and ready to work was a daily challenge. Because this class had a tendency to forget homework, I made a point to start their day with it. This ensured that homework was given the proper emphasis and after several weeks I noticed an improvement in homework completion. If it was Monday, agenda books would be taken out in order to ensure the students had their homework written down for the week (it was also written on the board and on the cluster's website). Otherwise, students would take their homework out and be given the opportunity to address problems they had with it. In general, 2-3 representative problems were walked through in class. Then, I would give them another problem to work on while I walked around and checked their homework for effort and completeness. I would note on their work if I saw reason for concern and suggest they come in for additional help at lunch or some other time. In general, they got an F if the homework was not attempted, a C if they did something but didn't show work or left large portions un-attempted and an A if most work was shown and most of the problems were attempted. This worked for me and for them. I felt an all or nothing policy for homework often resulted in a debate as to how much work was enough and didn't place enough emphasis on at least attempting problems. Graded homework too, put too much emphasis on getting the correct answer and not the process and also didn't give them or me the immediate feedback that just taking 5 minutes to glance over their work and listening to their questions in class provided.

II. LEARNING GOALS

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This unit on solving equations was started earlier than anticipated in response to difficulties I saw in the unit on surface area. During the unit on surface area, I noticed significant difficulty just understanding how to use an equation. One particular formative lesson had a higher level question for each geometric figure. It involved solving for a particular side given a total surface area and the other relevant measurements. Only 5 students demonstrated any ability to solve this type of equation. I ended up throwing the questions out and using them as a "teaser" when the rest of the work had been completed. The students had no idea how to isolate a variable. Given their slow progress through the curriculum in general and the impending end of the school year, I was concerned that they would not be prepared for the 8th grade curriculum if I did not allow for some considerable practice with solving equations. On the other hand, the students had shown a great deal of familiarity with the formulas for volume. The plan was to get back to volume after the end of the equation unit. With their newfound understanding of equations, combined with their pre-knowledge of volume, I was betting that we would have a

much easier progression through the volume unit and be able to complete it before the end of the year. In that sense, their post-test on surface area became a pre-test on equations.

The lessons for this unit were based on the following skills: recognizing like terms, isolating and solving for a variable, and simplifying and/or expanding an equation using the distributive property of multiplication over addition. The objectives of lessons 1 - 4 were to identify and combine like terms of a single variable equation and use the properties of operations to isolate the variable through mathematical modeling and algebra. This is relevant to common core standards 7.EE.1 and 7.EE.2 as well as MP 4. The students used the properties of addition and multiplication to combine terms and gained an understanding that manipulating the components of an equation can shed light on how to solve it. In addition, they were introduced to how to set up and use a hands-on equation scale to solve 2 step equations. Lessons 5 - 9 introduced the distributive property of multiplication over addition. The objective was to simplify and expand equations using the distributive property of multiplication over addition through the use of area models and the algorithm. This objective was first applied to equations of only constant terms, then to single variable equations. These lessons related to common core standards MP 7. 7.EE.2, 7.EE.3 and 7.EE.4. Students were looking at the structure of equations in order to identify opportunities to simplify or expand an equation to help in solving for a variable, they were rewriting that equation as multiple steps towards finding a solution and were using a variable to model a problem and solve for the unknown. Having been introduced to variables at the beginning of the year and by using them conceptual in many problems, the students were absolutely ready to start understanding their function in more complicated mathematical problems. This is a necessary preliminary step toward their 8th grade math curriculum.

~~ASSESSMENT METHODS~~III. ASSESSMENT PLAN

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Pre-Assessment

As mentioned, the pre-assessment was based on formative observation of students during a group work lesson on surface area and the results of the post assessment on surface area. This was the preference of my cooperative teacher. The rapid change in planning required in order to meet the needs of the students made this the best option available to us. In analyzing the data, I gave a 2 to students who had reliably demonstrated mastery of the chosen objective, a 1 to students who had shown familiarity with the chosen objective and a 0 to students who had demonstrated little or no understanding of the objective. On the pre-test, there were several opportunities to combine like terms and use the distributive property to make solving the equations easier. Students were given the necessary formulas needed to do the substation and calculation. 2 points were available for proper substitution and 2 points for proper calculation. Partial credit was given. As mentioned, the formative assessment also indicated that the students had tremendous difficulty using variables to solve for unknowns. An example of that formative assessment is included (Example1). This was an in class assessment with several models of the various figures given. The students were supposed to work in a group to decide the formula for surface area of their figure and then solve the 3 problems on the worksheet. One problem required having the answer and solving for the unknown measurement. Only a handful of students even attempted that assessment. The sample I chose to include was from a student making interesting choices with combining like-terms in order to work through the problem. The student actually scribbled out the last calculation. If she had followed through with her

thinking, I think she would have gotten the answer (but without using distribution). She must have lost her confidence. I did not include examples of unsuccessful attempts as I eventually told the students to drop those questions and we worked through them together in class.

Post-Assessment

Prior to the unit, less than a quarter of the students had shown any prior knowledge of solving multi-step equations. Once the unit was completed, 83% of the students had demonstrated mastery of the skills covered. This represented 83% of the boys and 83% of the girls. Interestingly enough, this class is evenly divided among girls and boys and each subgroup had the same number of students not demonstrate mastery. The post-assessment had a total of 58 points. The students were graded on being able to identify like-terms, constructing an area model with given specifications, solving for an unknown variable by following the 2-step procedure and being able to expand using the distributive property. From previous assessments, the students know that I expect all work to be shown and that I give partial credit for work that demonstrates understanding of the concept even if there are calculation errors, but only if I can follow their thinking.

Secondary Assessment

I felt pretty confident about how the post-assessment was going to go after I collected exit tickets as a follow up to in-class group work on the Distributive Property (Examples 2-4). I like this assessment, because the students had cutout models of the given figure at their desk. They could manipulate the models while they were trying to answer the exit ticket questions. This assessment allowed for the more hands-on learners to have a better vehicle for displaying their understanding and also provided a low-stress assessment for my many students who have trouble with timed testing situations. The students were in a good frame of mind during this assessment as this was a particularly fun class, as well. This further limits the opportunity for anxiety to diminish my students' performance. The results of this formative assessment were very good. In fact, quite indicative of the post-assessment itself! Students 9 and 23 and were the only two who didn't do well. Student 23 however, could have surprised me come post-assessment because he clearly was not interested in completing the exit ticket that day in class. Also, as this was done in a group work setting, I am always concerned that there is more "helping" going on than I see which can throw off my assessment, as well. I have included 3 examples of this class's work. I chose these works because they are good examples of the mistakes students made, as well as the methods students used to find a solution. This was a formative assessment for the distributive property and the instructions did not mention combining like-terms, but I had informed the students that I expected them to practice their combining like-terms talents, whenever possible, just as I expected them to simplify fractions. I was especially pleased when several exit tickets came back with all or many of the like-terms combined.

I don't see objective alignment…. Maybe use the table:

	Objectives/Observable Learning Outcomes	**Assessments/ Performance Criteria**	**Rationale**	**Planning for a Range of Learner Needs**
		Pre- and post-assessment of	Why you chose or developed	How you adapted each

		content understanding Other kinds of assessments	each assessment for each objective	assessment for specific individual differences and special needs of students in your classroom
Assessment #1 (Pre/Post)				
Content Objective #1				
Content Objective #2				
Process Skill Objective #1				
Process Skill Objective #2				
Attitude/ Disposition Objective #1				
Attitude/ Disposition Objective #2				
Assessment #2				

IV DESIGN FOR INSTRUCTION

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UNIT OVERVIEW

This unit was comprised of 9 standard lessons and a summative lesson prior to the post-assessment. The pre-assessment indicated the students had trouble substituting values for unknowns which would be addressed in the lessons focusing on variables. It also indicated that the students were not adept at looking for short-cuts in solving problems. This could either be from a lack of confidence in their calculation or an ongoing struggle making sense of the values they are given. I believed for Block 2 that is was a combination of both. My goal, therefore, was not just to teach them how to solve equations with unknown values, but also to get them to see the value in thinking ~~about a problems~~about problems prior to attempting a solution. My intention was to ask them to look for different strategies for solving each problem and to think about which one would be faster/easier for them. I hoped to help them gain an understanding that many different strategies may be possible and that it was good mathematical practice to manipulate equations in order to help "see" a solution (or potential solution). Additionally, although the students were slowly being introduced to the idea of unknown quantities and variables all year long, this was the time to ensure they understood the ramifications of working with a number whose value you don't know yet. They needed to see that the operational rules for variables were the same as numbers in most situations except for when it came to combining them. Finally, I wanted the students to understand the different representations for operations when dealing with variables (that a coefficient was being multiplied, for example). My big idea for this unit was that algebra allows us to expand our problem-solving abilities.

This unit focused on common core standards 7.EE. 1-4, all dealing with algebraic expressions and equations. The students were already proficient on the difference between expressions and equations and had been introduced to the idea of variables. In addition, I

included mathematical practice standards 1, 2, ~~3~~3, and 7 at various points throughout the unit, with a focus on MP1 and MP7. This was intentionally done as I wanted the students to pay particular attention to the information they are given and how it can be used creatively to determine a solution.

The first four lessons introduced the concepts of like-terms and isolating the variable. It was important that the students understood the process of solving a single-variable equation thoroughly as this will help them tremendously in the 8th grade curriculum. I used a ~~Youtube~~YouTube video, hands-on equation scales and other visuals such as crazy chicks to solidify these two key concepts. IPads with ~~Quicktime~~QuickTime tutorials pre-loaded were provided on occasion for additional help. The next five lessons focused on the distributive property of multiplication over addition. I used area models both in abstract and as manipulatives to help the students visualize the distributive property and better grasp why it works. Livescribe notebooks were provided for additional support and calculators were available throughout. This concept is important because it introduced students to the idea that they can manipulate an equation to simplify a problem. The goal was to improve their number sense and understanding of the properties of operations so that they could expand and contract with confidence. As with most of my lessons, heavy use was made of the class Smartboard. Additionally, much work was done in groups and many opportunities were given for the students to verbalize their thinking even when they may struggle to put the numbers to their words. Skills were assessed through in-class work, Turn and Talks, and individual whiteboard problem-solving. Stations with math games were employed to keep them engaged, foster problem solving skills and provide varied opportunities to practice the new concepts. All new concepts were introduced using a gradual release model of instruction. Homework mainly consisted of additional practice work with the odd website link for additional help. My ELL was frequently given translated copies whenever possible. Generally, this student managed well in math class and was motivated and positive about schoolwork, but word problems, especially, required additional support. As mentioned, homework was graded based on percentage of completion and all homework was reviewed prior to the start of the next class. This allowed for time to adjust the emphasis of the class should the prior evening's homework prove to have been problematic. Below is a detailed description of each lesson (by lesson number), the standards and objectives of focus, the tools used and the methods of assessment.

Lesson 1
Standards: 7.EE. 1 7.EE.2
Objectives: Students will model the concept of combining like-terms using hands-on equation scales. They will then apply this concept algebraically.
Lesson Elements: Teeter-totter introduction (keeping balanced) followed by a Smartboard presentation of hands-on equations and the algebraic equivalent. Student given hands-on equation scales for modeling and closure with a Think, Pair, Share discussion.
Justification: The Smartboard presentation is combined with scales for each student to allow for a gradual release of problem solving. The students were expected to show understanding of the concept of setting up their scales. I demonstrated both concepts simultaneously with the Smartboard. Students who required more modeling were encouraged to use the hands-on equation scale more fully. Additionally, the Special Education teacher and I encouraged those students who needed further modeling to draw triangle around the variable terms and squares around the constant terms to aid in identification. The ELL student was given brief translated

instructions in Spanish. This lesson was an introduction to 2 step equations helping them to differentiate variables from constants. I wanted to develop their confidence in understanding of property of operations and build their math vocabulary.
Assessment: Formative assessment was done in class through observation. I checked that scales were properly set and the students were correctly distinguishing between terms that are multiplied and terms that are added. At this point, only addition and multiplication was used. All variables were left with a coefficient of 1 or 2 which could be easily visualized without introducing inverse operations. A second formative assessment in the form of a brief turn and talk was given and students summarized their answers to the class. Students were given 5 problems on combining like-terms to do at home.

Lesson 2
Standards: 7.EE.1 7.EE.2
Objectives: Students will combine like terms algebraically and by modeling with hands-on equations. They will use their knowledge of operations to isolate and solve for a variable.
Lesson Elements: A Smartboard lesson reviewing combining like terms and introducing the concept of isolating a variable was combined with the hands on equation models and algebraic practice. A vocabulary list with new terms was provided... Closure with Fill in the blank using small whiteboards for immediate feedback.
Justification: In this lesson, students see a slightly different visual for combining like terms (chicks running lose). After a quick review, we talked about the meaning of 2 step equations and discussed the steps. Students had multiple opportunities for practice both as a group and individually at their desks. Students were encouraged to write down the 2 steps in their notes. I double-checked students with IEPs /504s regarding having lists and specific instructions for the exact wording.
Assessment: Formative assessment was done in class through observation. A handful of students were allowed to solve the problems at the board. Luckily, some of my students who aren't great class participants LOVE to use the Smartboard. This gives me a chance to ensure they really know something and aren't just copying. Additionally, I passed out the whiteboards for a closing assessment. The students had to provide the missing vocabulary words on their boards and show them to me. This is also a great way to get full participation from the class. Students were given 4 problems with combining like terms and isolating the variable for homework. Additionally, students were given an additional challenge problem as part of their homework to attempt. I required 1 particular ~~students~~student to be sure and give it a shot and informed them individually.

Lesson 3
Standards: 7.EE. 1 - 2 MP.1
Objectives: Students will work at stations applying the concepts of solving two-steps equations in various real-world and mathematical settings.
Lesson Elements: Students were divided into 6 groups of 4 (1 student was absent) to will work at various stations solving two step equations. IPads were set up with ~~Quicktime~~QuickTime videos of mini-lessons for additional support. One station had them supplying the missing constants and coefficients in order to get the correct x-value. Another was a game requiring them to correctly solve two step equations as part of a race and a third sub-divided them into pairs to play equation war (like the card game).

Justification: Students worked together to improve their understanding of solving 2-step equations. They have had 2 lessons based on a gradual release model and I felt they were ready to start doing these problems on their own. This builds their confidence. Group work allows for the exploration of other methods of problem solving. We closed with a discussion of which stations they had gotten to and which aspects were sticking points. Most groups did chose at some point to watch the IPad ~~Quicktime~~QuickTime tutorial I made reviewing the 2 steps.
Assessment: Formative assessment was done in class through observation and follow-up questioning. The handouts were collected at the end of class and reviewed by me. I returned them the next day for the students to finish and review. This lesson was done in 2 parts as the first day was only half as long as usual.

Lesson 4
Standards: 7.EE. 1 - 2 MP.1
Objectives: Students will work at stations applying the concepts of solving two-steps equations in various real-world and mathematical settings.
Lesson Elements: This was part 2 of the stations lesson as the students did not have time to finish. The elements were the same as lesson 3.
Justification: I returned the notated worksheets and they continued with their groups and opened with some rapid questioning of the process and vocabulary and what the rules of the various stations were. Then I left them to their groups. We closed with a discussion of the merits of each of the stations. This was a good lesson for my students who have problems focusing. Equations are often too dry for them, but this provided good pacing and encouragement from peers.
Assessment: Again, there was plenty of opportunities for formative assessment in class. Additionally, the students had a homework handout. It was self-checking. The correct answers spelled out the solution to a riddle.

Lesson 5
Standards: MP.2. 7. EE.1 - 4
Objectives: Students will model the distributive property using area and apply the concept to algebraic problems. Students will conceptualize quantities as the sum of parts in order to simplify and solve real-world and mathematical problems.
Lesson Elements: Students will be walked through a Smartboard lesson. The ELL student was given a translated version of the ending word problem. In addition, opportunities for proving the distributive property on calculators were provided. Guided notes provided regarding ways to write the operation for multiplication. Those students that require extra lists were given an extra page with these notations listed as an additional visual.
Justification: This was the opening of the distributive property. Students had a firmer handle on the meaning of like-terms and how to combine them at this point. This first lesson used only constants and applied the concept to area models such as dividing a soccer field. I gave my students who required extra visuals appropriate area models for each problem that they could label to help with problem solving. This was presented as a gradual release model with some students working at their desk while a few others worked through problems on the Smartboard, in order to be formatively assessed. In addition, we closed with a discussion problem that was meant to tease out their understanding of ways the distributive property could be used.
Assessment: A handout for homework was given.

Lesson 6
Standards: MP.7 7.EE.2 - 3
Objectives: Students will model the distributive property of multiplication over addition using cardboard cut-out area models. They will demonstrate the expansion and simplification of the distributive property and how it helps to solve mathematical problems.
Lesson Elements: I started with a quick Smartboard led review of the distributive property with constants. Area model cutouts for hands-on work, ~~Livescribe~~Live scribe pens and notebook was set up at a station for expanding and contracting equations using the distributive property. Calculators were available. The students were given cutouts of various rectangular area models to manipulate. They were to use them to write down equivalent equations for calculating area. Additionally, another station was created with a Livescribe notebook and a handout of expanding and simplifying equations using the distributive property. They could use the notebook as a short tutorial on working through the problems.
Justification: This was an excellent lesson for visualizing why the distributive property works. A third station was set up for students that finished early. They needed to create an area model to the specifications given.
Assessment: Summative assessment was given on the in-class handouts for each station. Completed remarks were returned the next day. Formative assessment was ongoing in class.

Lesson 7
Standards: 7. EE.2 - 4
Objectives: Students will apply their understanding of the distributive property to include unknown quantities. Students will model the distributive property by drawing appropriate area models and forming heir algebraic equivalents.
Lesson Elements: Opening with discussion on real-life scenarios when taking complete measurements not possible. Smartboard presentation on incorporating variables into the distributive property. Calculators, if necessary.
Justification: The students had a solid understanding of manipulating constant equations with the distributive property. They had been repeatedly asking for the purpose of this property beyond just making some multiplication easier. Again, this was a gradual release lesson. We went over problems and then they have several problems to work on in class. I called one student per problem afterwards to demonstrate the solution on the Smartboard. The class was allowed to provide assistance.
Assessment: The in-class problems allowed me to assess the students' progress. Students were given a homework handout and a video link for extra review of this concept for review in class the next day.
Lesson 8

Standards: MP.7 7.EE.2- 4
Objectives: Students will model the distributive property of multiplication over addition using cardboard cut-out area models, they will demonstrate the expansion and simplification of the distributive ~~property~~property, and how it helps to solve variable equations. Lesson Elements: Quick review of how variables are used in math was given after assessing that some students were unsure about the operational rules for variables still. The rest of the class was similar to Lesson 6, but with different handouts and cutouts using variables and constants.

Justification: The lesson on the distributive property using only constants was very helpful in making the concept concrete. I wanted to do something similar for the introduction of variables. . The first station with the cutouts required the students to also solve for the missing quantity so I left the Livescribes available to anyone who needed them for additional support. Students who were finished early could make more cut-outs showing variable equations. This time, they could design their own and provide their own solution.
Assessment: Again, summative assessment was given for the handout and returned the next day. An exit ticket was also given for summative assessment and is provided as a secondary assessment model.

Lesson 9
Standards: 7. EE.1 7.EE.3 7.EE.4 MP. 1
Objectives: Students will model and solve real-world problems using the distributive property of multiplication over addition.
Lesson Elements: This lesson utilized a Smartboard presentation, additional ~~graph~~graph, and area model paper and colored pencils were provided for work, calculators and a translated version for my ELL, as well as a cheat sheet of previously worked problems as models for students provided especially for students requiring additional support.
Justification: We opened with a challenging word problem on planning for a party and calculating total cost. I challenged them to come up with a path to solve it. We talked about the information the problem provided. We used this format with several problems--me presenting the problem, the students pulling out the information and me showing them how to put it into equation form with less and less input from me. The students then worked together to solve a couple of story problems. I closed with the solution to the opening problem. I explained that, while I didn't expect them to get all the way through the problem, I wanted them to see how far they could get with just the algebra that they ~~knew~~knew, and how algebra allowed them to pull more information from a problem then they originally thought they had. This lesson was designed to get them thinking about how to apply all the math concepts they know toward solving real-world problems.
Assessment: Students were formatively assessed as they worked as groups in their table. A word problem was given as homework and reviewed the next day.

Lesson 10
Standards: 7.EE.1, 7.EE.2, 7.EE.3, 7.EE.4, MP.3
Objectives: Students will solve real-world and mathematical problems by combining like-terms and isolating the variable through knowledge of operations and the distributive property of multiplication over addition. Students will demonstrate their knowledge of these concepts by providing instructional assistance to each other.
Lesson Elements: Smartboard presentation of several problems (real-world and mathematical) was given, as well as copies of the important notes from previous lessons were given out. Calculators were provided. Translation of word problems were given to the ELL. Students requiring additional assistance were provided with slightly more detailed versions of the notes.
Justification: The students worked in groups to solve the problems in the packet. We used a jigsaw method with each group getting a problem and then presenting it to the class on the chalkboard with me asking questions if nobody else did. This allowed them the opportunity to pull together all they had learned and use it to solve a variety of problems.

Assessment: Students were formatively assessed in class. Packets were checked in class to be sure the answers were correct. 2 problems were included in the packet as homework and for a quick refresher prior to the post-assessment the next day.
Below are the lesson plans for Lessons 1-5, as examples.

Jennifer, you didn't need to do so many lessons, but if this was the length of the unit – okay…

Western Connecticut State University
Lesson Plan

Student Teacher Candidate Grade Level 7th Date of lesson
Institution Bethel Middle School Length of lesson 40 Minutes

Content Standards: Identify one or two primary local, ~~state~~state, or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?

7EE1: Apply properties of operations as strategies to add, subtract, factor and expand linear expressions with rational coefficients.
7EE2: Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.

Learner Background: Describe the students' prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students' previous performance in this content area or skill impact your planning for this lesson?

- This is lesson 1 on the unit of solving single-variable equations. Students have been introduced to variables and have used them in simple expressions and one-step equations. They recently used similar concepts when doing substitutions for geometric formulas, but they have not had to solve with multiple steps.

Student Learning Objective(s): Identify specific and measurable learning objectives for this lesson.

- Student will identify like-terms in class and as homework.
- Students will use hands on equations to model the concept of combining like-terms.
- Students will develop a connection between the hands-on equation model and the algebraic equivalent.

Assessment: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria.

Formative: Students will be assessed for understanding through group and in class problem solving.
Formative: Students will be formatively assessed through a Turn and Talk and Share discussion.
Summative: Students will be given a homework page to be graded for completeness and reviewed the next day in class.

Materials/Resources: List the materials you will use in each learning activity including any technological resources.

- Smartboard presentation
- Notebook slides preprinted with differentiate slides, as well.
- Hands on equation scales, ~~pawns~~pawns, and numbers.
- Homework pages with additional differentiated packets
- ELL translated instructions and models.

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

Initiation	as a class but already separated into pairs
Lesson Development	as a class and working in partner sets of 2 or 3
Closure	as a class

Initiation (8 minutes):
Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)

The lesson will be initiated with the YouTube video link showing kids trying to balance the teeter-totter. Talk about what it takes to get the teeter-totter balanced (weight is equal). Ask them if the weight on one side will change if the students change seats. Be prepared for the kids who say that it could matter if the heavier kids are at the end. Explain how this is like combining like-terms on an expression. Talk about how maybe you want all the boys together so you can see how many girls there are. Which is the constant and which is the unknown?

Lesson Development (25 minutes):
Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s).

Slide	Development
Objective (3-4 minutes)	Read the objective. Ask for the verbs. Ask them what the items on the equation scale are and what we would be rearranging. Ask them what it means to make a connection.
Slides 3 and 4 (4 minutes)	Help the students identify the terms. Fill in the definitions for like-terms, constants, ~~coefficients~~coefficients, and variables. Ask a student to explain the difference between x+3 and 3x. Talk about the number of terms in each expression and the operation involved. Check to make sure EVERYONE is taking notes.
Slide 5 (1 minutes)	I do (combining and scale explanation).
Slide 6 (4 minutes)	We do: scale set up, equivalent equation and combining on both.
Slide 7 (4 minutes)	We do: scale set up, equivalent equation and combining of both.
Slide 8 (10 minutes)	They do... Call on a student for each problem to demonstrate the scale and one to show the combining on the Smartboard.

Closure (6 minutes):
Think, Pair, Share: How does moving the elements of the scale relate to combining like terms on in an equation? Why do we use a scale to show this concept? What operation are you doing when you combine like terms?
Have them discuss the above and ask at least 5 students to offer a point they discussed.

Individuals Needing Differentiated Instruction: Describe 1 to 3 students with learning differences. These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.
Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.

Which students do you anticipate may struggle with the content/learning objectives of this lesson?		
Student name	Evidence that the student needs differentiated instruction	How will you differentiate instruction in this lesson to support student learning?
	Students have IEPs for additional instructions.	Students will receive packets with less to complete in their vocabulary sheets. Students' will receive homework pages are slightly different with more structure.
	Student is an ELL	This student will receive a second packet with translated instructions for the hands-on scale and the vocabulary we will go over in class.

Western Connecticut State University
Lesson Plan

Student Teacher Candidate Grade Level 7th Date of lesson
Institution Bethel Middle School Length of lesson 40 Minutes

Content Standards: Identify one or two primary local, ~~state~~state, or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?
7EE1: Apply properties of operations as strategies to add, subtract, factor and expand linear expressions with rational coefficients.
7EE2: Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.
Learner Background: Describe the students' prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students' previous performance in this content area or skill impact your planning for this lesson?

- This is lesson 2 on the unit of solving single-variable equations. Students have been introduced to variables and have used them in simple expressions and one-step equations. They recently used similar concepts when doing substitutions for geometric formulas, but they have not had to solve with multiple steps. They just covered the vocabulary needed for the first part of this chapter and have been introduced to the concept of combining like-terms.

Student Learning Objective(s): Identify specific and measurable learning objectives for this lesson.

- Student will identify the two-steps (combining like-terms and isolating the variable) necessary to solve for an unknown.
- Students will be able to verbalize the steps in the process using correct terminology.
- Students will use hands on equations to model the concept of combining like-terms and isolating the variable.
- Students will develop a connection between the hands-on equation model and the algebraic equivalent.

Assessment: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria.

Formative: Students will be assessed for understanding through group and in class problem solving.
Formative: Students will be formatively assessed through a "Fill in the Blank" close
Summative: Students will be given a homework page to be graded for completeness and reviewed the next day in class.

Materials/Resources: List the materials you will use in each learning activity including any technological resources.

- Smartboard presentation
- Notebook slides preprinted with differentiate slides, as well.
- Hands on equation scales, ~~pawns~~pawns, and numbers.
- Homework pages with additional differentiated packets
- ELL translated instructions and models.
- Individual whiteboards, ~~erasers~~erasers, and markers.

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

Initiation	as a class but already separated into pairs
Lesson Development	as a class and working in partner sets of 2 or 3

Closure as a class using their whiteboards

Initiation (8 minutes):
Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)

Show the picture of the teeter-totter. Explain to the class that you are trying to balance a teeter-totter with a group of students. One of the students is your "x". Do you want your "x" to be on the same side as the teeter-totter as you? Do you want him sitting with all your friends so he can ask them questions about you? Try to get them to use the word--isolated.

Lesson Development (25 minutes):
Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s).

Slide	Development
Objective (3-4 minutes)	Read the objective. Ask a student to identify how this objective is different than yesterday's objective.
Slides 3 and 4 (4 minutes)	Walk through the slides with the money being counted and then the unruly chicks. Talk about what you would need to do BEFORE you could weigh the chicks if they are running around ~~bezerk~~ berserk (collect them!!!)
Slide 5 (3 minutes)	Have students look at the equation. What's the first step? Now, think about that "EX"...what's the second step??? I Do....(combining and solving)
Slide 6 (3 minutes)	We do: combining and solving
Slide 7 (3 minutes)	We do: combining and solving
Slide 8 (8 minutes)	They do... Call on a student for each problem to demonstrate the scale and one to show the solution on the Smartboard. PASS OUT THE WHITEBOARDS!

Closure (6 minutes):
Whiteboard close: Students use the whiteboards to answer the Fill in the Blank questions. Check for understanding. Ask a couple challenging questions if there is time --go on to additional slides with equations and ask for the steps or the like terms in them. Individuals Needing Differentiated Instruction: Describe 1 to 3 students with learning differences. These students may

be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.
Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.

Which students do you anticipate may struggle with the content/learning objectives of this lesson?		
Student name	Evidence that the student needs differentiated instruction	How will you differentiate instruction in this lesson to support student learning?
	Students have IEPs for additional instructions.	Students' packets have the steps copied down on the I DO and WE DO problems and then a space for them to write them in themselves for the YOU DO problems. Students' will receive homework pages that are slightly different with more structure.
	Student is an ELL	This student will receive a second packet with translated version of the 2 steps and of the last page with the Fill in the Blank close to ensure she understands the instructions.
	Students like to be challenged.	These students' homework packet with not have an asterisk next to the last problem indicating it is a challenge problem. They need to attempt it.

Western Connecticut State University
Lesson Plan

Student Teacher Candidate Grade Level 7th Date of lesson
Institution Bethel Middle School Length of lesson 26 Minutes

Content Standards: Identify one or two primary local, ~~state~~state, or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?

7EE1: Apply properties of operations as strategies to add, subtract, factor and expand linear expressions with rational coefficients.
7EE2: Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.
MP1: Make sense of problems and persevere in solving them.

Learner Background: Describe the students' prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students' previous performance in this content area or skill impact your planning for this lesson?

This is lesson 3 on the unit of solving single-variable equations. Students are becoming familiar with the 2 steps for solving equations (combining like-terms and isolating the variable). They are ready for some more independent practice .

Student Learning Objective(s): Identify specific and measurable learning objectives for this lesson.

Students will collaborate and/or compete in groups to solve various mathematical problems related to 2 step equations.

Assessment: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria.

Formative: Students will be assessed for understanding through group and individual problem solving.
Summative: Students will complete various handouts to be assessed as in-class work.

Materials/Resources: List the materials you will use in each learning activity including any technological resources.

- Smartboard presentation with groupings
- 3 IPads with ~~Quicktime~~QuickTime tutorial pre-installed.

- Equation race directions, 5 pawns, equation cards, scratch paper, and game board.
- 2 step equation fill in the blank handouts
- 2 sets of Math war cards, scratch paper, and directions.
- Translated Spanish packet.
- Equation-builder station for additional work

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

Initiation	as a class but already separated into groups
Lesson Development	working in groups
Closure	as a class, still in their groups

Initiation (6 minutes):
Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)

Have the seating chart on the board for the students as they enter. Ask the students to think of some games they know that have to do with math. List them on the opening slide. Be sure and ask them how they are mathematical. Try to get them to card games and dice or spinning games. Tell them that they are going to be playing some math games related to equations.

Lesson Development (15 minutes):
Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s).

Have the students spend 3 minutes reading the instructions at their stations. Have one person from each group explain to the class what they will be doing. After asking key students to repeat the instructions, tell them to get started at the stations they are on, but that this lesson is to be continued tomorrow. Let them know you will be stopping them in 10 minutes.

Closure (4 minutes):
Have the students share any difficulties they may have had with their stations and how (if) they resolved them.

Individuals Needing Differentiated Instruction: Describe 1 to 3 students with learning differences. These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.

Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.

Which students do you anticipate may struggle with the content/learning objectives of this lesson?		
Student name	Evidence that the student needs differentiated instruction	How will you differentiate instruction in this lesson to support student learning?
	Students have IEPs for additional instructions.	Check on these students to repeat the instructions individually. Ask them to repeat the task and the goal.
	Student is an ELL	This students receives the Spanish translation for all the instructions.
	Students like to be challenged.	Have a 4th station set up with an equation builder that sets various expressions equal. Let the student write some down and try to solve.

Western Connecticut State University
Lesson Plan

Student Teacher Candidate Grade Level 7th Date of lesson
Institution Bethel Middle School Length of lesson 40 minutes

Content Standards: Identify one or two primary local, ~~state~~state, or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?

7EE1: Apply properties of operations as strategies to add, subtract, factor and expand linear expressions with rational coefficients.
7EE2: Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.
MP1: Make sense of problems and persevere in solving them.

Learner Background: Describe the students' prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students' previous performance in this content area or skill impact your planning for this lesson?

This is lesson 4 on the unit of solving single-variable equations. Students are becoming familiar with the 2 steps for solving equations (combining like-terms and isolating the variable). They are ready for some more independent practice and are finishing up a station lab that they started on an advisory day.

Student Learning Objective(s): Identify specific and measurable learning objectives for this lesson.

- Students will collaborate and/or compete in groups to solve various mathematical problems related to 2 step equations.

Assessment: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria.

Formative: Students will be assessed for understanding through group and individual problem solving.
Summative: Students will complete various handouts to be assessed as in-class work.

Materials/Resources: List the materials you will use in each learning activity including any technological resources.

- Smartboard presentation with groupings
- 3 IPads with QuickTime tutorial pre-installed.
- Equation race directions, 5 pawns, equation cards, scratch paper, and game board.

- 2 step equation fill in the blank handouts
- 2 sets of Math war cards, scratch paper, and directions.
- Translated Spanish packet.
- Equation-builder station for additional work

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

Initiation	as a class but already separated into groups
Lesson Development	working in groups
Closure	as a class, still in their groups

Initiation (4 minutes):
Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)
Have the seating chart on the board to remind the students as they enter. Have the returned handouts already at the stations and give them time to look at the comments. Ask the students to summarize what they had done in the previous class for each other. Then have them talk about any challenges. The students should then rotation to the next station.

Lesson Development (30 minutes):
Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s).

Tell the students they will be switching stations in 15 minutes. Again, take the time to have key students individually summarize to you the task at hand while everyone is getting started. Give them a 5 minute warning and then a 2 minute pack up warning and then switch the stations after the 15 minutes are up.

Closure (4 minutes):
Talk about their favorite stations and why. Constantly bring it back to the 2 steps.

Individuals Needing Differentiated Instruction: Describe 1 to 3 students with learning differences. These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.
Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.

Which students do you anticipate may struggle with the content/learning objectives of this lesson?		
Student name	Evidence that the student needs differentiated instruction	How will you differentiate instruction in this lesson to support student learning?
	Students have IEPs for additional instructions.	Check on these students to repeat the instructions individually. Ask them to repeat the task and the goal.
	Student is an ELL	This students receives the Spanish translation for all the instructions.
	Students like to be challenged.	Have a 4th station set up with an equation builder that sets various expressions equal. Let the student write some down and try to solve.

Western Connecticut State University
Lesson Plan

Student Teacher Candidate Grade Level 7th Date of lesson:

Institution Bethel Middle School Length of lesson 40 Minutes

Content Standards: *Identify one or two primary local, ~~state~~state, or national curricular standards this lesson is designed to help students attain. How will the learning tasks lead students to attain the identified standards?*

7. EE.2 Use properties of operations to generate equivalent fractions.
7. EE.4 Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Learner Background: *Describe the students' prior knowledge or skill related to the learning objective(s) and the content of this lesson, using data from pre-assessment as appropriate. How did the students' previous performance in this content area or skill impact your planning for this lesson?*
This is the introduction to part 2 of a unit on 2 Step equations. The students have had several lessons on solving simple 2 step equations by combining like-terms and isolating the variable.

Student Learning Objective(s): *Identify specific and measurable learning objectives for this lesson.*

- Students will be able to simplify a numerical equation by distributing a constant outside the parentheses.
- Students will recognize and be able to use opportunities to simply multiplication problems by breaking multipliers into the sum of smaller numbers and distributing.

Assessment*: How will you ask students to demonstrate mastery of the student learning objective(s)? Attach a copy of any assessment materials you will use, along with assessment criteria.*

- Formative assessment: problems worked through as a group in class and then individually in class, as well.
- Summative assessment: worksheet for homework.

Materials/Resources*: List the materials you will use in each learning activity including any technological resources.*

- Smartboard presentation and corresponding worksheets
- Translated instructions.
- Differentiated area model example pages

Learning Activities:
Identify the instructional grouping (whole class, small groups, pairs, individuals) you will use in each lesson segment and approximate time frames for each.

- *Initiation: seated as a class (5 minutes)*
- *Lesson development: as a class (30 minutes)*
- *Closure: as a class (5 minutes)*

Initiation (5 minutes):
Briefly describe how you will initiate the lesson. (Set expectations for learning; articulate to learners what they will be doing and learning in this lesson, how they will demonstrate learning, and why this is important)

- Talk about soccer in Southbury. How there aren't enough fields so the kids often play on half a field.
- Ask if any of them had experienced it.
- Ask what they would do if someone wanted to know the area of each field.
- What if they wanted to know if they had exactly half of the total field?
- Is there a faster way to figure it out than calculating the area of the whole field and each of the parts?

Lesson Development (30 minutes):
Describe how you will develop the lesson, what you will do to model or guide practice, and the learning activities students will be engaged in order to gain the key knowledge and skills identified in the student learning objective(s).

- Slides 1-4: Walk through the first 4 slides. Ask them why in our opener it would be enough to see if just the lengths of the field were exactly ~~have~~ half of the original. Give them time to understand the relationship.
- Slides 5 and 6: Discuss the different ways of showing multiplication. Make sure they understand exactly what a number next to a parentheses looks like when it means multiplication. That 3+(4+5) is not a multiplication problem.
- Slide 6 discuss why we can pull the 3 outside the parenthesis.
- Slides 7 and 8 walk through the different processes step by step. Take my time on this and make sure everyone knows where each number came from.

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Closure (5 minutes):

Slides 7 and 8: Walk through the different processes step by step. Take my time on this and make sure everyone knows where each number came from.

Individuals Needing Differentiated Instruction: Describe 1 to 3 students with learning Differences. These students may be special or general education students and need not be the same students for each lesson. Students may represent a range of ability and/or achievement levels, including students with IEPs, gifted and talented students, struggling learners, and English language learners.

Note: Differentiated instruction may not be necessary in every lesson. However, over the course of the student teaching placement, it is expected that each student teacher will demonstrate the ability to differentiate instruction in order to meet the needs of students with learning differences.

Which students do you anticipate may struggle with the content/learning objectives of this lesson?		
Student name	Evidence that the student needs differentiated instruction	How will you differentiate instruction in this lesson to support student learning?
	Students have IEPs for additional instructions.	Students are receiving packets with pre-created area models for them to complete and use in their solutions.
	Student is an ELL	This student will receive a second packet with translated instructions. Use of my Google translator will be provided as needed.

V. INSTRUCTIONAL DECISION-MAKING

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I found myself constantly revising my instructional practice. The inclusion of this entire unit at this point in the curriculum was based on my observation that the students required a more extensive understanding of equations then an end of the year unit would allow. The first two lessons were changed midstream in order to slow down the pace for this block. In fact, I had originally planned to teach combining of like-terms both constants and variables as one lesson and, in fact, did so for the other blocks. However, several students were having trouble in class with understanding why you couldn't add the coefficient of a variable to a constant, in particular. Also, I had two students in a row attempt to combine constants across an equation. I therefore, slowed down the pace, skipped the variable ~~work~~work, and focused on constants. I spent extra time with the teeter-totter analogy discussing what happens if two kids change seats versus move to the other side of the teeter-totter. I assigned only those problems for homework that dealt with constants and reworked the homework for the next lesson. I felt this was absolutely necessary so as not to allow my class to become discouraged from the onset. The next day we focused on variables and I spent a long time using analogies such as "I have 4 red jolly ranchers in my right hand. A person blindfolds me and places 2 jolly ranchers in the left hand. Is it accurate to say I have 6 red jolly ranchers?" We discussed why I could not combine the 2 unknowns with the 4 known elements. I used similar analogies throughout the lesson. Additionally, while I had specifically shown several of my more challenged students how to differentiate between variable terms and constants, I now presented a similar strategy in class and had all the students do it themselves. The slower pace was an important improvement for this block and I feel improved their understanding of these concepts.

A second example of me revising my lesson occurred during lesson 2. I had originally included a problem both as a "we do" as well as a "you do" whose unknown was a fraction. This cause enormous confusion. I discussed with my cooperating teacher the class's reaction and was advised that I should stick to positive whole numbers for block 2. I did go ahead and revise my problems going forward to ensure positive, whole number outcomes. On one hand, it allowed for the students to focus on the concepts. On the other hand, it set fractions and negative numbers up to be scary and unusual answers. I regret this decision in hindsight. I realized, after the fact, that it was a bad strategy in so far as the students need to be comfortable with fractions, decimals and start getting comfortable with integers. This revision denied them that opportunity.

VI. ANALYSIS OF STUDENT LEARNING

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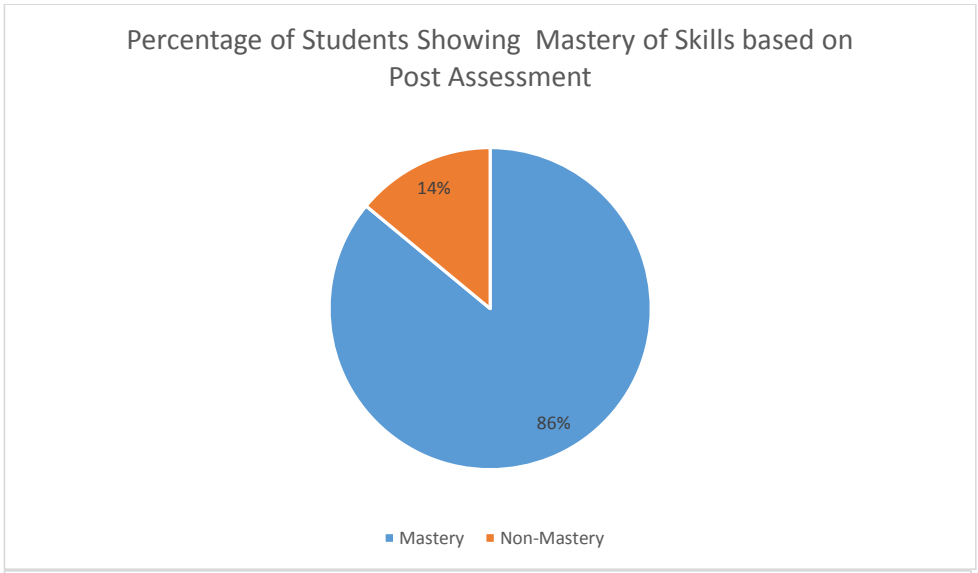
I analyzed my pre- and post- assessment data for overall mastery in the female versus male population and in my IEP/504 population versus the general population. I found that females and males showed equal mastery of skills and only a small variation between my students with special needs and my other students. I also looked for improvement in skills from pre- to post- assessments. I looked at 2 data points: students who improved in their understanding of combine like-terms and students who improved in their understanding of the distributive property. Students were assessed numerically: 0 represented little understanding of the concept, 1 representing partial understanding of the concept and 2 indicating mastery or almost mastery of the concept. Significant growth was determined by a jump of 3 or more total points. Partial growth was determined by a jump of 2-3 points and not significant growth was represented by a jump of 1 or fewer points. Below are charts and graphics representing these analyses.

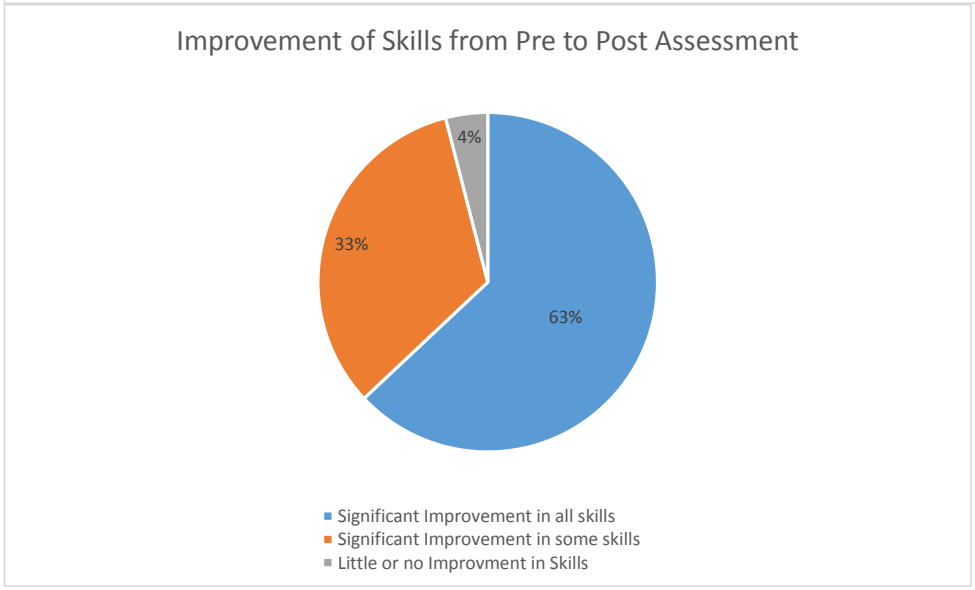
Student Data on Content Mastery (make the table so the headings roll across pages)

		Pre-assessment		Post-assessment					
Student	**Gender**	***2 Steps***	***Dist. Prpty.***	***2 Steps***	***Dist. Prpty.***	***Mstry (0,1,2)***	***Increase Pre to Post***	**IEP or 504?**	**IEP/504**
1	M	1	0	2	2	2	1	y	IEP - extra time, check progress, list steps
2	M	0	0	1	0	1	1	N	
3	M	0	0	2	2	2	2	Y	IEP- 2x timed tests, rephrase, check progress, have student restate, encouragement, extended learning time
4	F	1	0	2	2	2	1	N	
5	M	0	0	2	2	2	2	Y	504 - 1.5 time, restate, check progress
6	M	0	0	2	2	2	2	N	
7	F	1	0	2	2	2	1	N	
8	M	0	0	2	2	2	2	N	Extended learning time

9	F	0	0	1	0	1	1	Y	IEP - untimed tests, simplified wording, check progress, provide models, extended learning time
10	F	0	0	2	2	2	2	Y	Testing room (informal mid-year decision)
11	F	0	0	1	0	1	1	N	
12	M	1	0	2	2	2	1	Y	IEP - 2x timed tests, preferential seating, cue behavior
13	F	0	0	2	2	2	2	N	
14	F	0	0	2	2	2	2	N	
15	F	0	0	2	2	2	2	N	
16	M	0	0	2	2	2	2	Y	IEP - 2x timed tests, preferential seating, cue behavior, extended learning time.
17	M	0	0	2	2	2	2	N	
18	F	0	0	2	2	2	2	N	
19	F	1	0	2	2	2	1	N	
20	F	0	0	2	2	2	2	N	

21	M	0	0	2	2	2	2	Y	IEP - 1.5 tests, check progress, extended learning time, review directions
22	M	0	0	2	2	2	2	Y	IEP - Extra time, check progress, provide models, extended learning time
23	M	0	0	1	0	1	1	Y	IEP- 2x timed tests, rephrase, check progress, have student restate, cue behavior, extended learning time
24	F	0	0	2	2	2	2	N	


Percentage of Students Showing Mastery of Skills based on Post Assessment
14%
86%
Mastery
Non-Mastery


Improvement of Skills from Pre to Post Assessment
4%
33%
63%
Significant Improvement in all skills
Significant Improvement in some skills
Little or no Improvment in Skills

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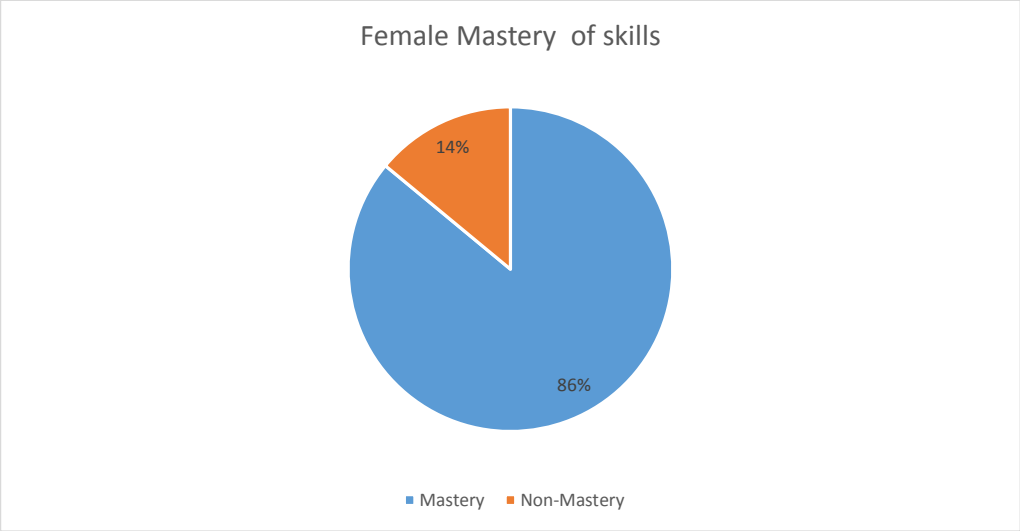

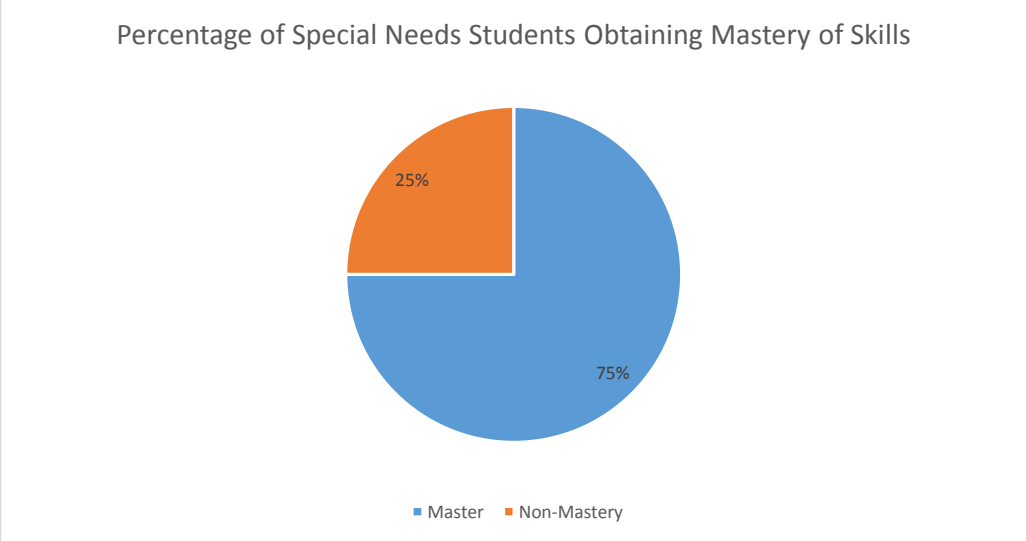

I believe the above data is an accurate representation of my students' development in this unit. My own informal formative and summative assessments of in class and homework assignments indicate the same level of understanding for this class. In general, the concept of what it means to solve to a two-step equation was well absorbed by this class. They definitely understood the distributive property as a whole, but I would expect this concept to need more review come next year. I was pleasantly surprised throughout my student teaching experience to

see very little gender difference in math achievement. This unit proved to be no different. I was pleased as well by the slight distinction between my students with special needs and the other students. This result has not been typical in general, but reflects, I think, a concerted effort on my part to provide quality notes and visuals for this unit. My special education teacher was extremely helpful making sure the students were diligent about setting up their scales, highlighting the different terms and specify the steps. We also spent a lot of time in the extended learning block on these classes which I think gave the students the extra time they needed for these skills.

I have included several students' samples of Pre and Post assessment (Examples 5 – 12). Student 12's assessments were included as they represented a student who started the unit with some understanding of how to manipulate quantities to ease the process. His work showed a higher level of comfort combining like-terms than his peers. Student 17 was included because I saw in his work a significantly increasing comfort level when solving for variables. Student 23's work was shown as an example of how a student with significant focusing and motivational problems can be affected by his difficulties. This particular students has displayed decent number sense and ability in the past, but he struggles continuously in the classroom environment. Furthermore, there is anecdotal evidence to suggest that both parents are not onboard with his physician's recommend treatment and setbacks occur depending on which parent is seeing the student off to school on a given day. Finally, student 24 was included as an example of how appropriate and rigorous language assistance can improve the performance of English language learners in the classroom. I spent significant effort ensuring this student had linguistic access to the content. She did the rest.

Where is the second assessment?

Task: Analyze your assessment data, including pre/post assessments and formative assessments to determine students' progress related to the unit learning goals. Use visual representations and narrative to communicate the performance of the whole class, subgroups, and two individual students. Conclusions drawn from this analysis should be provided in the "Reflection and Self-Evaluation" section.

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VII. REFLECTION AND ~~GROWTH~~ SELF-EVALUATION

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I was very pleased with the increase in mathematical vocabulary my students displayed after this unit. Also, I saw many instances where students were having informal debates about the merits of one method of solution over another. This indicated to me a significant improvement in their numbers sense and understanding of the mathematical structure of an equation. I strongly feel that this was a successful unit for my students. Objectives met? Which ones? In particular, I believe the students are now very comfortable with combining like-terms and isolating the variable. This was probably in large part due to the repetitiveness with which this process and attended to in class. Every time a student struggled with finding an unknown, I would ask "which step are we on?" and "How do we do that step?" Less successful, I think was improving the students understanding of the properties of operations and numbers. By not including fractions and negative integers, I short-changed my students. If I had added another 2 lessons to the unit, I may have had more opportunities to address their lack of understanding in these areas and have made this a richer unit, in general. Whenever possible, my examples and practice problems were based on ideas relevant to 7th graders: area models were lacrosse or

soccer fields, variables stood for tickets to the movies or iTunes purchases and isolating the variable was akin to getting your "ex" as far away as possible.

As mentioned, I added a lesson to this class to improve my students' grasp of the unit. I would have liked to have spent more time on real-world problems and plan on incorporating these "story problems' more thoroughly in future instructional sequences. I believe strongly that new concepts need to be incorporated immediately into the curriculum so that students do not shy away from using them. This is exactly the opposite of what happened with fractions and integers. I need to put more effort into my scaffolding of skills to ensure my students have completely absorbed them into their knowledge system.

Finally, I purposefully shied away from too many graded assessments for this class. It is my opinion that students can be just as adequately and richly assessed formatively and that this particular class already had a confidence problem which testing seemed to exacerbate. Additionally, this cluster was used to endless testing time. The students were allowed to come up during lunch, after class or even during class to finish assessments. This policy made it impossible for me to return assessments to students in a timely manner. Therefore, the date I obtained would benefit me more than them! My less-assessments strategy presented a problem when it came to backing up my observations with data, however. This experience highlighted a need for me to find a better system to quantify my students' mastery which fits my teaching method.

You missed some questions/responses:

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In your discussion, include the following:

1. Were the goals/objectives for your instructional sequence met? Provide evidence for your response
    a. Select the learning goal where your students were most successful. Provide two or more possible reasons for this success. Consider your goals, instruction, and assessment along with student characteristics and other contextual factors under your control.
    b. Select the learning goal where your students were least successful. Provide two or more possible reasons for this lack of success. Consider your goals, instruction, and assessment along with student characteristics and other contextual factors under your control. Discuss what you could do differently or better in the future to improve your students' performance.
2. Were you able to implement the principles of culturally-relevant teaching in your instructional sequence?
3. What questions or issues does this instructional sequence reveal about your teaching or the students in your classroom?
4. How did you change your planned instructional sequence as the lessons were actually taught?
5. How might you teach this instructional sequence differently if you were to do it again? Why?
6. Reflection on possibilities for professional development.
    a. Describe at least two professional learning goals that emerged from your insights and experiences with the TWS.
    b. Identify two specific steps you will take to improve your performance in the critical area(s) you identified.

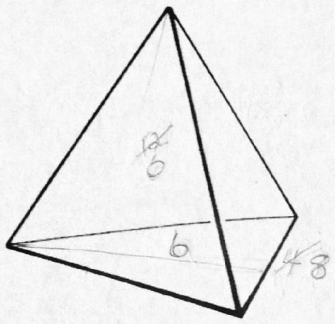
Student 4
Example 1

Surface Area of a Triangle-base Pyramid Worksheet

Name [redacted] Blk [redacted]

The **slant height** of a pyramid or prism is the height of one of its triangular faces. Calculate the surface area of the given pyramids when: a is the slant height, b is the height of the triangle base and c is the base length measurement.

eg base!



1. a= 12ft; b= 6ft; c=4 ft

$3 \times \frac{1}{2}(12)(4) + \frac{1}{2} \times (6)(4) = 84$

$72 + 12$

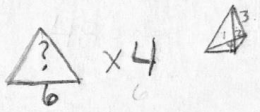
2. a= 6cm; b=6cm, c=8cm

$3 \times \frac{1}{2}(6)(6) + \frac{1}{2} \times (6)(8) = 78$

$54 + 24 = 78$

Example 1

3. The surface area of a triangle-based pyramid is 48in sq. Each face has a base of 6 in. What is the measurement of all the slant heights given that they are equal?



?

$48 = 4 \times \frac{1}{2}(6 + ?)$

good try!

$48 = 2(6 + ?)$

[redacted]

this was ok!

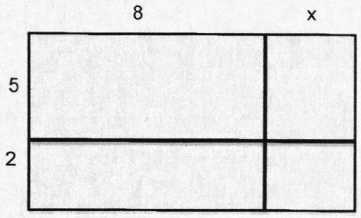
Student 2
Example 2

Distributive Property Exit Ticket

Name [redacted] Blk 2

★ Write an equation to show that the sum of the smaller rectangles is equal to the area of the larger rectangle.

√+ ☺



Equation: $(8+x)+(7) = 56 + 7x$

excellent combining!

★ Expand the following expression using the distributive property.

3 (x + 6)

Expression: $3x+18$

Example 3

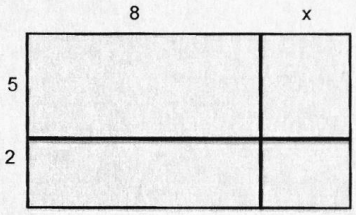
Student 6

Distributive Property Exit Ticket

Name [redacted] Blk 7

★ Write an equation to show that the sum of the smaller rectangles is equal to the area of the larger rectangle.

√+



Equation: (40)+2x+(16)+2x=(8x)+(7+2) good

could have combined

★ Expand the following expression using the distributive property.

3 (x + 6)

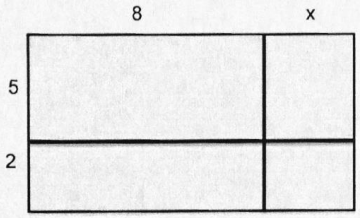
Expression: 3x+18

Student 9
Example 4

Distributive Property Exit Ticket

Name [redacted] Blk 2

★ Write an equation to show that the sum of the smaller rectangles is equal to the area of the larger rectangle.



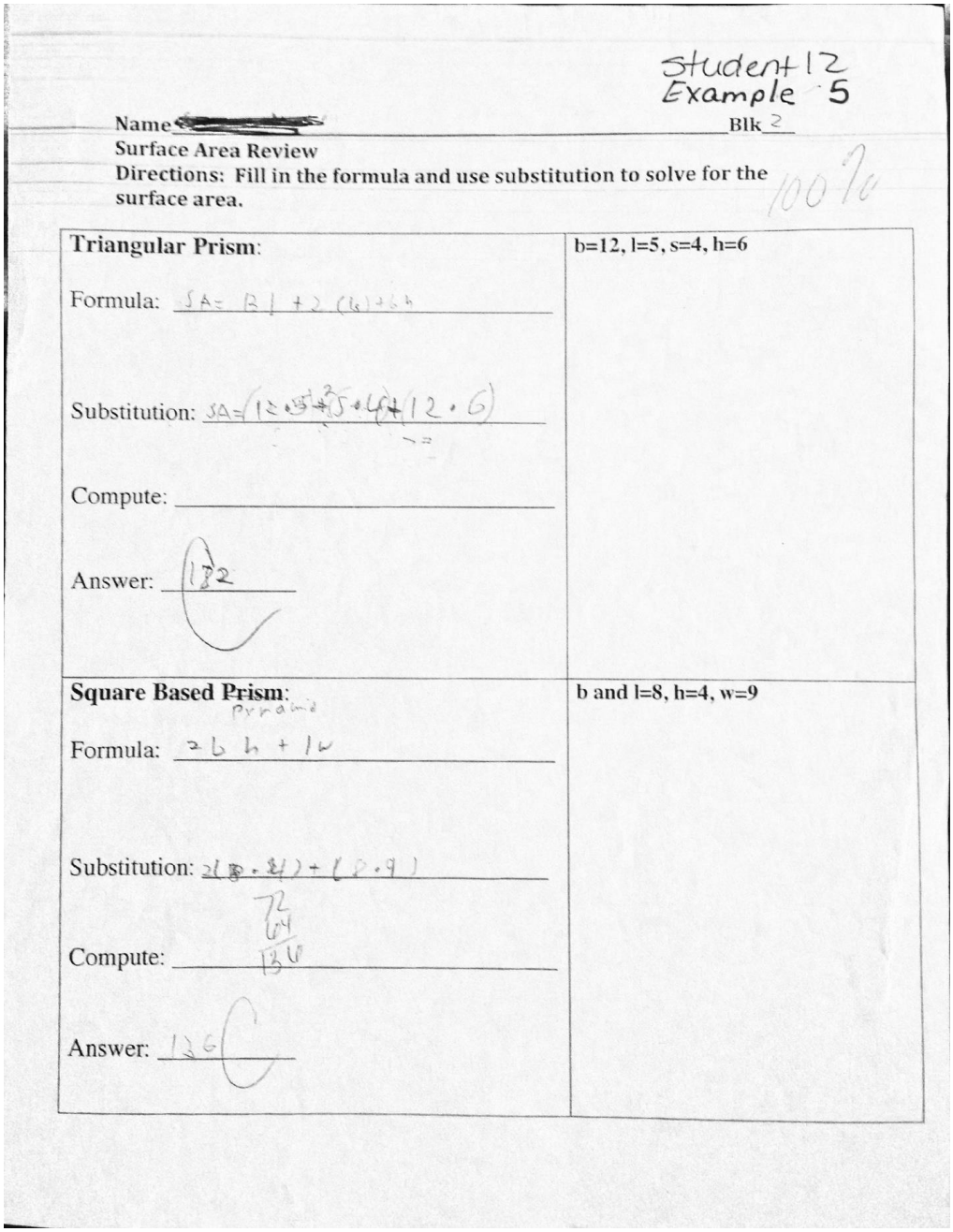
Equation: (10·x) = 40 + 16 + 5x + 2x

[redacted] you should be adding for total length!

★ Expand the following expression using the distributive property.

3 (x + 6) when you distribute you multiply, then add

Expression: 3x + 9



Student 12
Example 5

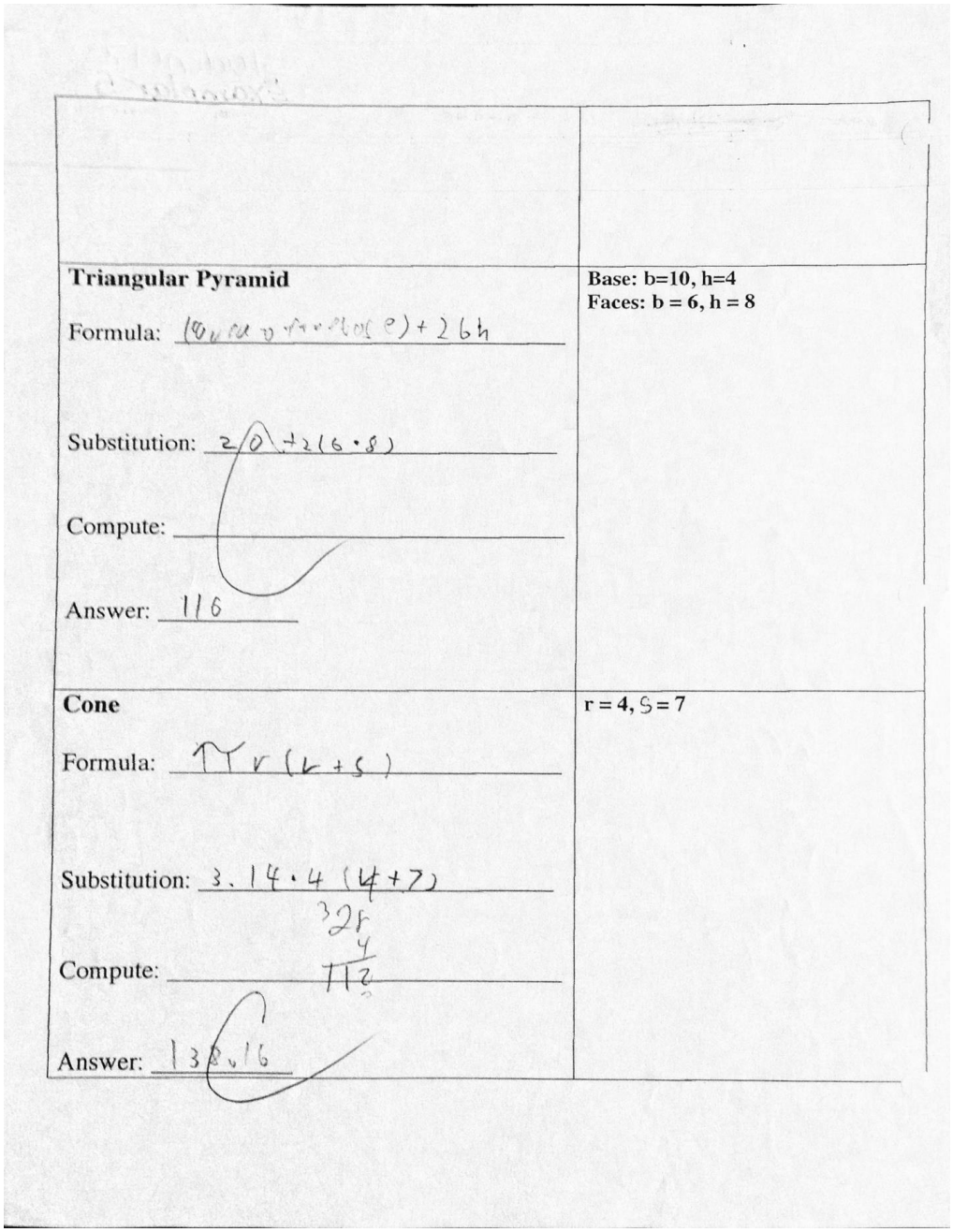
Name [redacted] Blk 2

Surface Area Review

Directions: Fill in the formula and use substitution to solve for the surface area.

100%

Triangular Prism: Formula: SA= B l + 2 (b) + b h Substitution: SA= (12 · 5 + 5 · 4 + 5 · 4) + (12 · 6) Compute: Answer: 132	b=12, l=5, s=4, h=6
Square Based ~~Prism~~ Pyramid: Formula: 2 b h + l w Substitution: 2(8 · 8) + (8 · 9) 72 64 Compute: 136 Answer: 136	b and l=8, h=4, w=9



Triangular Pyramid Formula: (illegible) Substitution: 20 + 2(6 · 8) Compute: Answer: 116	**Base: b=10, h=4** **Faces: b = 6, h = 8**
Cone Formula: $\pi r(r+s)$ Substitution: 3.14 · 4 (4+7) Compute: 32 / 4 / 112 Answer: 138.16	**r = 4, s = 7**

Student 12
Example 6

Name [redacted] Block 2+3 Points 64 54

Distributive Property Assessment

Part 1:
Draw a triangle around the variables and square around the constants. (3 points each= 6 total)

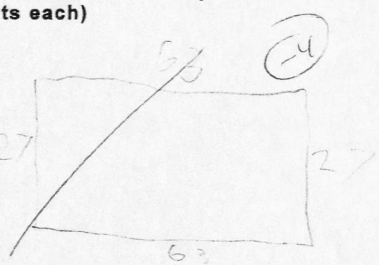
4x + 3x + 8 = 2 + x + 12

54/58 = 93%

2x +3 x + 3x = 4 + x

Part 2:
Draw an area model to represent the following equation:
(4 points each)

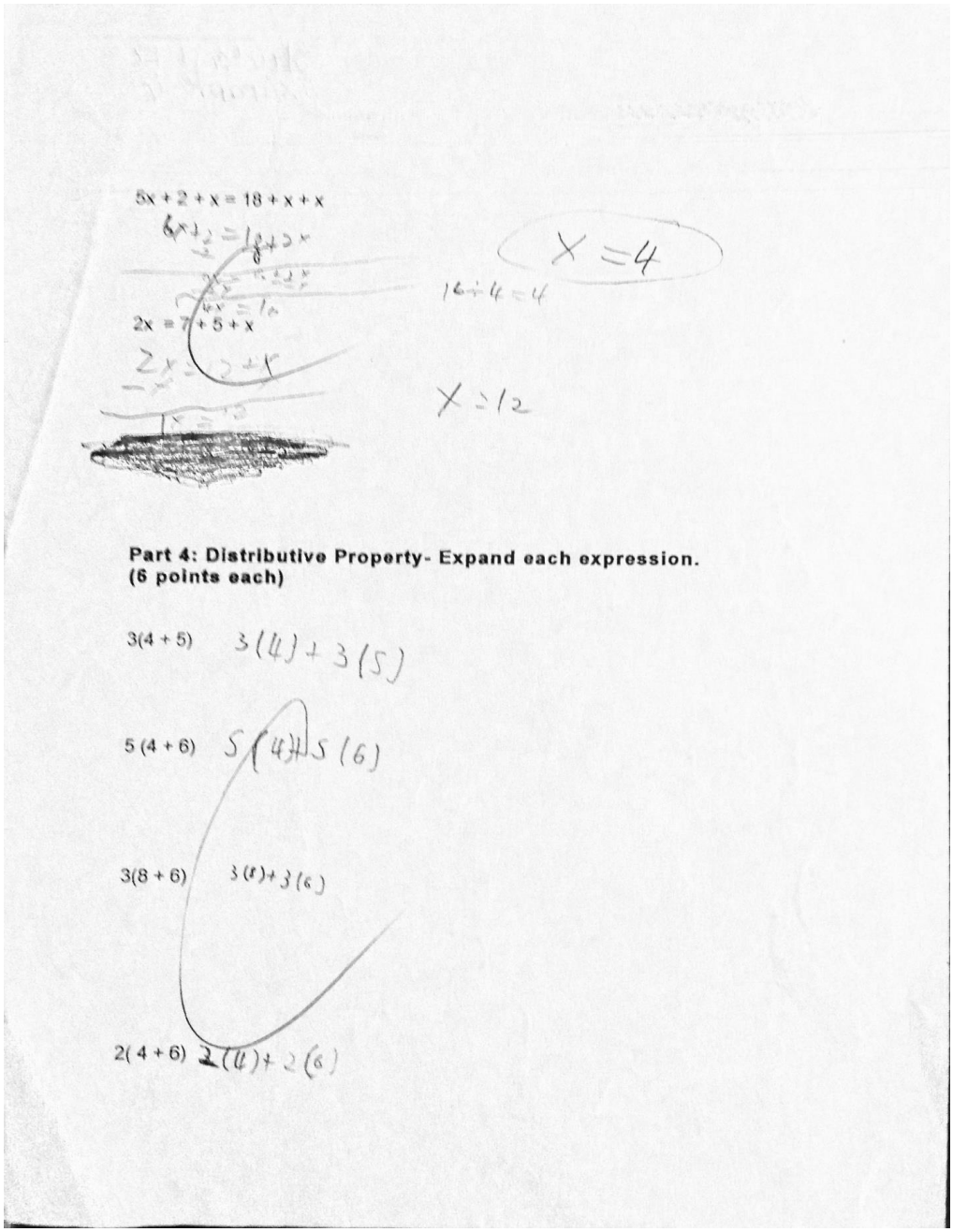
9(3+7)



Part 3: Solve for x (6 points each)

x + 4+ x + x = x + x + 40

2x + 2x = 12



5x + 2 + x = 18 + x + x

$X = 4$

$18 \div 4 = 4$

2x = 7 + 5 + x

$X = 12$

Part 4: Distributive Property- Expand each expression. (6 points each)

3(4 + 5) $3(4) + 3(5)$

5 (4 + 6) $5(4) + 5(6)$

3(8 + 6) $3(8) + 3(6)$

2(4 + 6) $2(4) + 2(6)$

Student 17 example 7

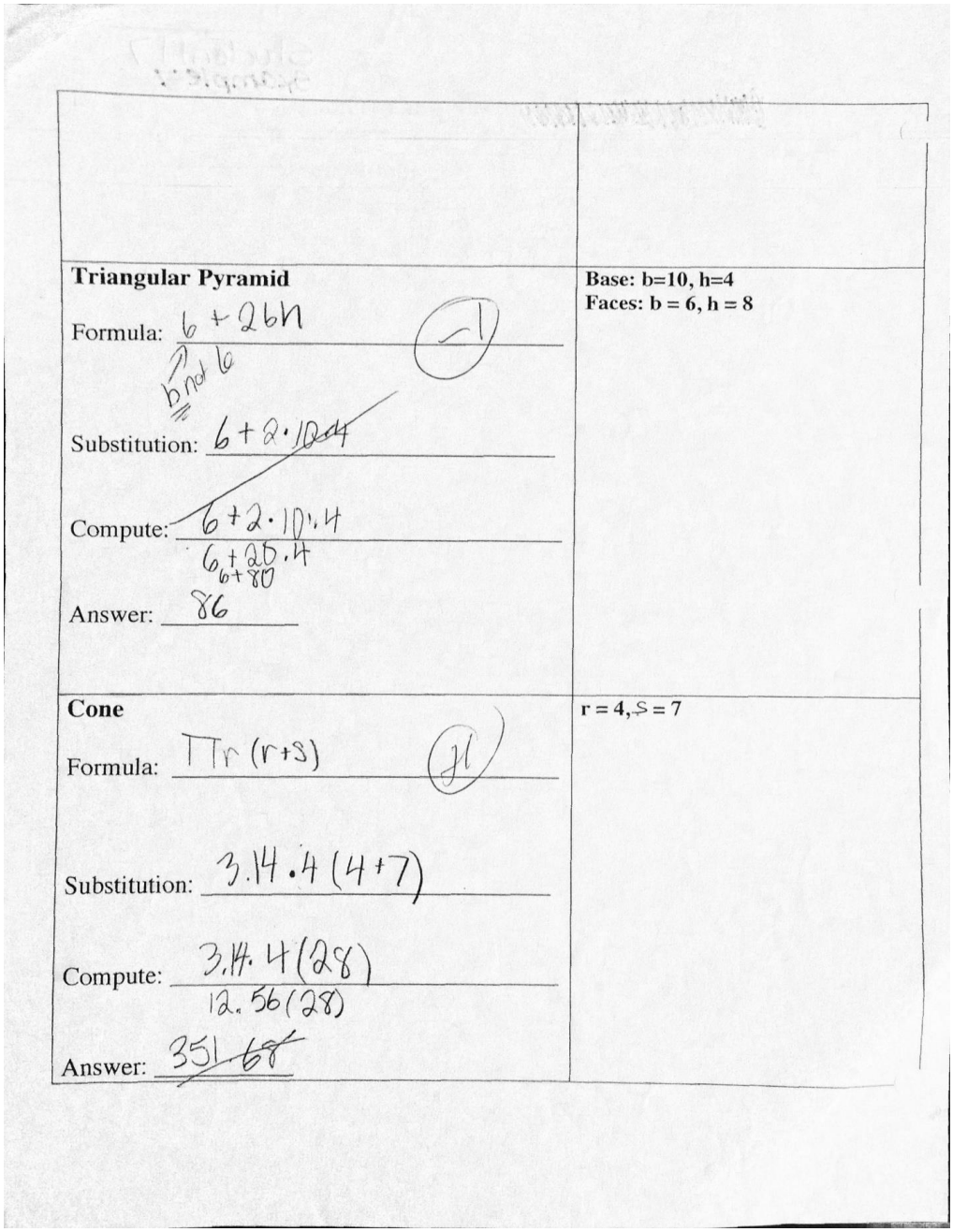
Name [redacted] Blk 2

Surface Area Review

Directions: Fill in the formula and use substitution to solve for the surface area.

4/8

Triangular Prism: Formula: $bl+2(ls)+bh$ Substitution: $12\cdot5+2(5\cdot4)+12\cdot6=$ Compute: $12\cdot5+2(20)+12\cdot6=$ $60+40+72=172$ Answer: 172	**b=12, l=5, s=4, h=6**
Square Based ~~Prism~~: Pyramid Formula: $2bh+lw$ Substitution: $2\cdot8\cdot4+8\cdot9$ $16\cdot4+72$ $64+72$ Compute: _____ Answer: 136	**b and l=8, h=4, w=9**



Triangular Pyramid Formula: $6 + 2bh$ (−1) b and h Substitution: $6 + 2 \cdot 10 \cdot 4$ Compute: $6 + 2 \cdot 10 \cdot 4$ $6 + 20 \cdot 4$ $6 + 80$ Answer: 86	**Base: b=10, h=4** **Faces: b = 6, h = 8**
Cone Formula: $\pi r(r+s)$ (πl) Substitution: $3.14 \cdot 4(4+7)$ Compute: $3.14 \cdot 4(28)$ $12.56(28)$ Answer: 351 ~~68~~	**r = 4, s = 7**

Student 17
example 8

Name [redacted] Block 2+3 Points 64

Distributive Property Assessment

Part 1:
Draw a triangle around the variables and square around the constants. (3 points each= 6 total)

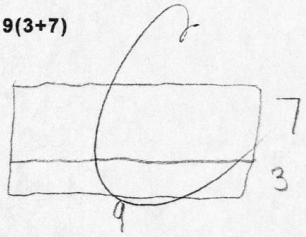
4x + 3x + 8 = 2 + x + 12

2x + 3x + 3x = 4 + x

100

Part 2:
Draw an area model to represent the following equation:
(4 points each)

9(3+7)

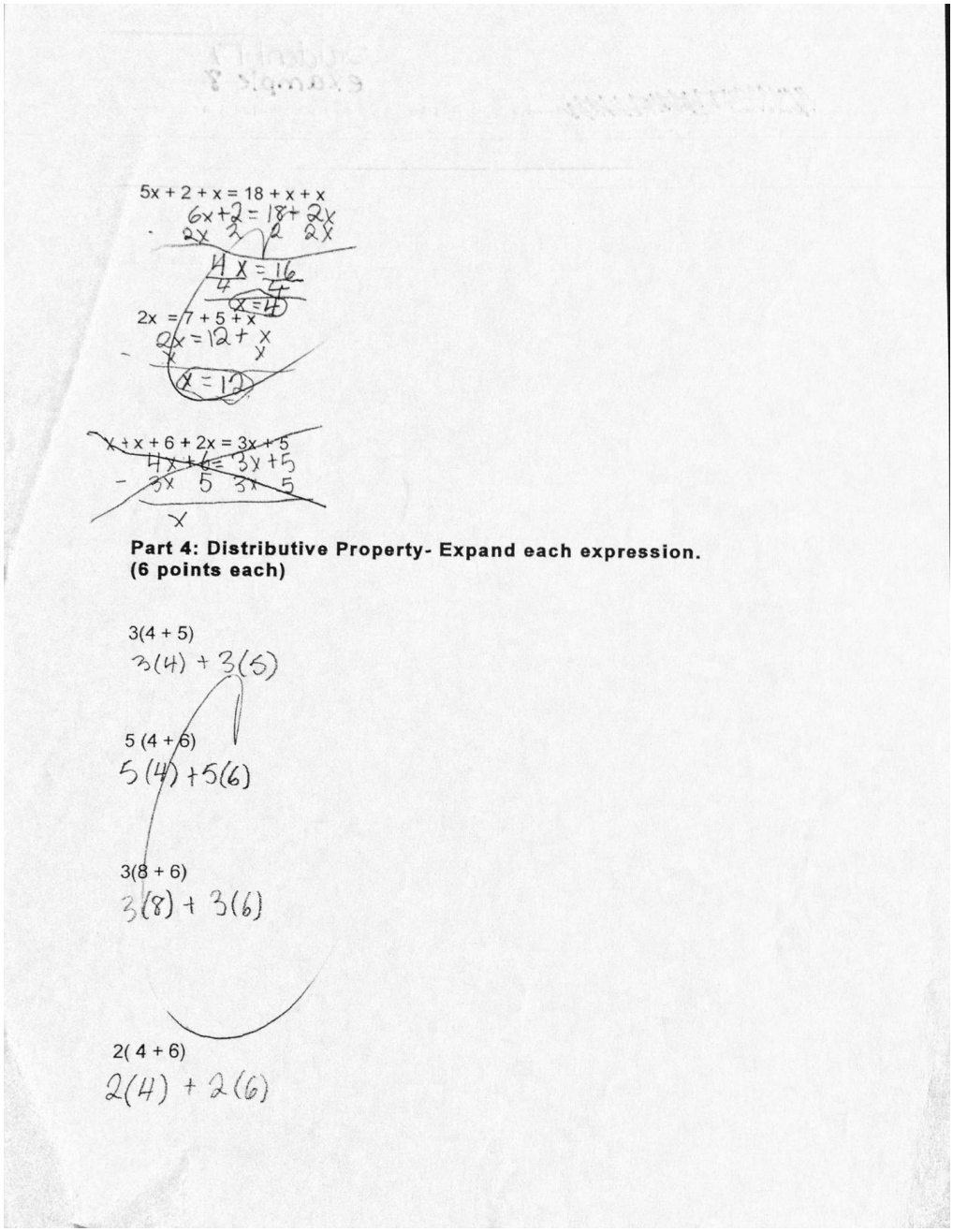


Part 3: Solve for x (6 points each)

x + 4 + x + x = x + x + 40

3x + 4 = 2x + 40
− 2x 4 2x 4
x = 36

2x + 2x = 12
4x = 12
4 4
x = 3


5x + 2 + x = 18 + x + x
6x + 2 = 18 + 2x
2x 2 2x
4x = 16
4 4
x = 4
2x = 7 + 5 + x
2x = 12 + x
x x
x = 12
x + x + 6 + 2x = 3x + 5
4x + 6 = 3x + 5
- 3x 5 3x 5
x
Part 4: Distributive Property- Expand each expression.
(6 points each)
3(4 + 5)
3(4) + 3(5)
5 (4 + 6)
5(4) + 5(6)
3(8 + 6)
3(8) + 3(6)
2(4 + 6)
2(4) + 2(6)

Student 23 example 9

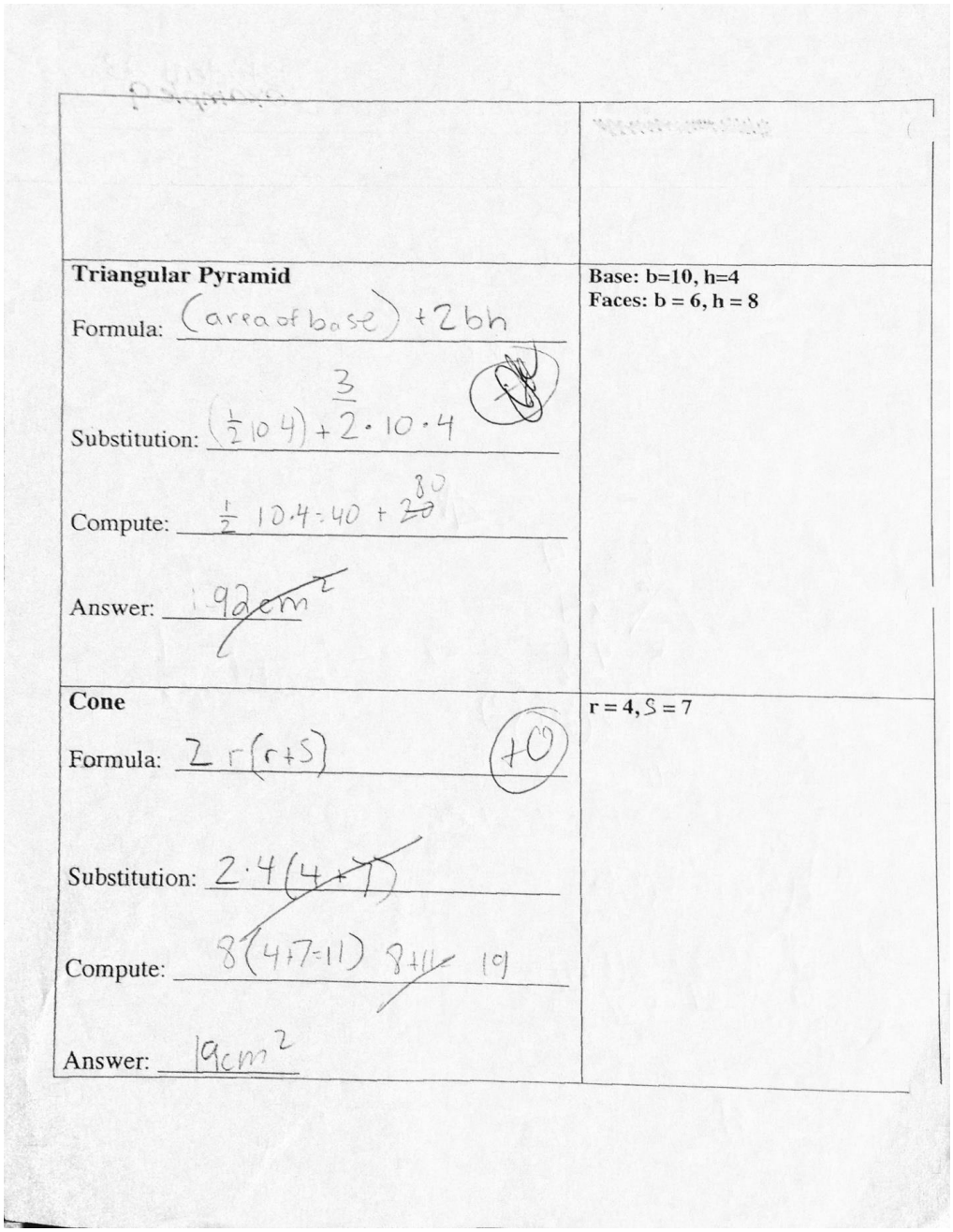
Name [redacted] Blk 2

Surface Area Review

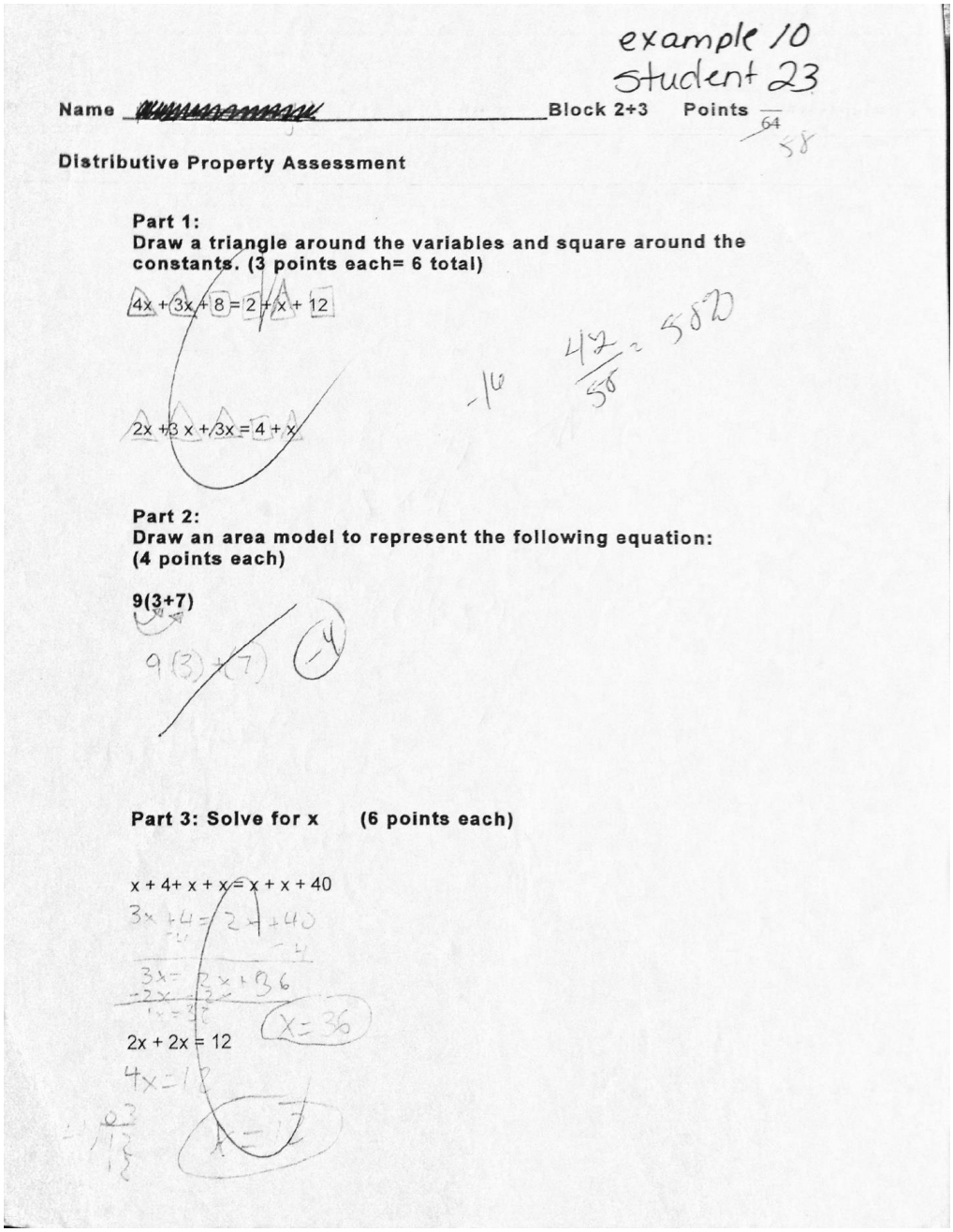
Directions: Fill in the formula and use substitution to solve for the surface area.

5

Triangular Prism: Formula: $bl+2(ls)+bh$ +1 Substitution: $12(5)+2(5\cdot4)+12\cdot6$ Compute: $17+(40)+72=129cm^2$ Answer: $129cm^2$	b=12, l=5, s=4, h=6
Square Based ~~Prism~~: Pyramid Formula: $2bA+lw$ +2 Substitution: $2\cdot8\cdot4+8\cdot9$ Compute: $64+72$ Answer: $136cm^2$	b and l=8, h=4, w=9



Triangular Pyramid Formula: (area of base) + 2bh Substitution: $\frac{1}{2}(10 \cdot 4) + 2 \cdot 10 \cdot 4$ Compute: $\frac{1}{2}\ 10 \cdot 4 = 40 + 80$ Answer: ~~192 cm²~~	**Base: b=10, h=4** **Faces: b = 6, h = 8**
Cone Formula: 2 r (r+5) +10 Substitution: ~~2 · 4 (4 + 7)~~ Compute: ~~8 (4+7=11) 8+11 19~~ Answer: 19cm²	**r = 4, S = 7**



example 10
student 23

Name [redacted] Block 2+3 Points 58/64

Distributive Property Assessment

Part 1:
Draw a triangle around the variables and square around the constants. (3 points each= 6 total)

4x + 3x + 8 = 2 + x + 12

2x + 3 x + 3x = 4 + x

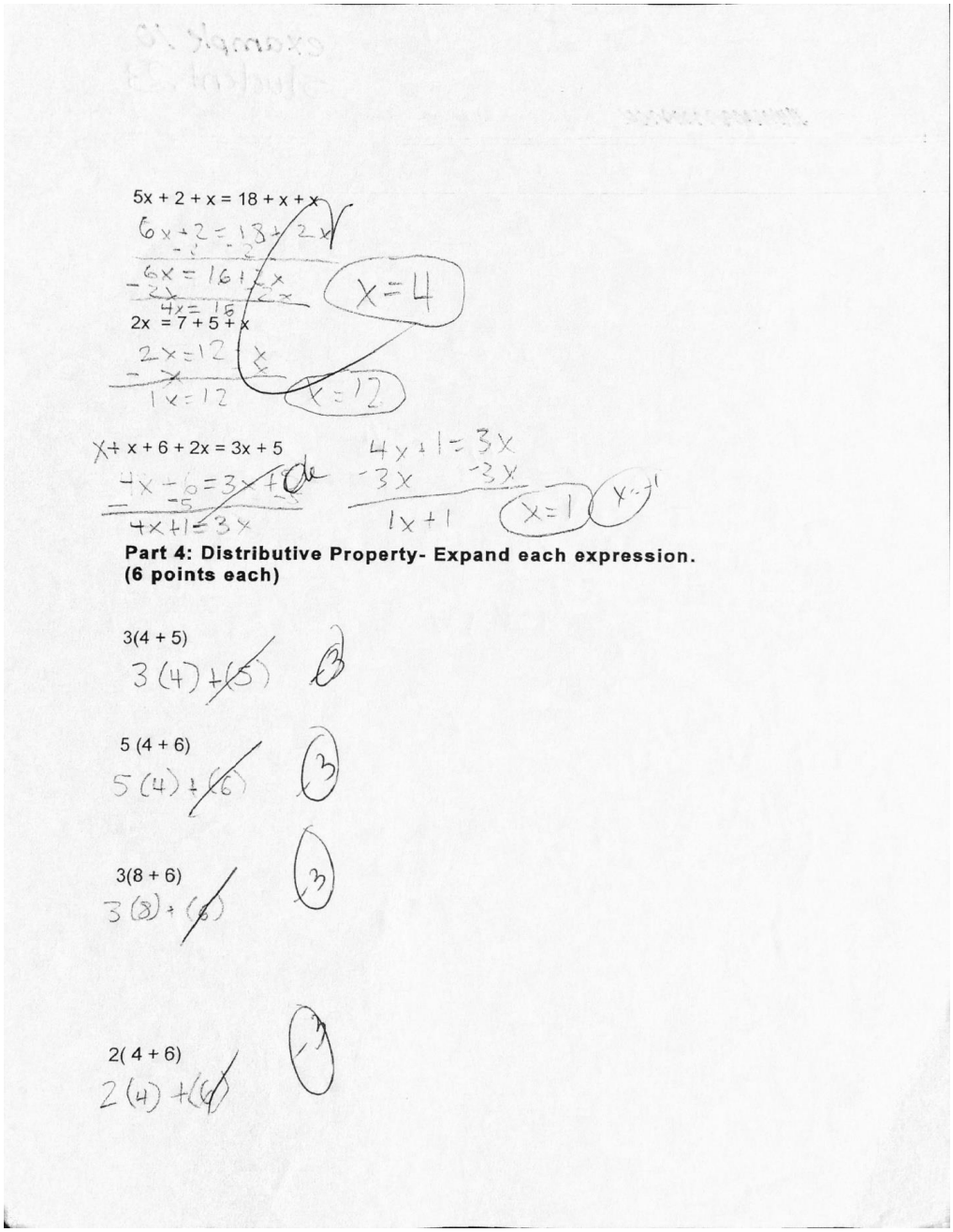
Part 2:
Draw an area model to represent the following equation:
(4 points each)

9(3+7)

Part 3: Solve for x (6 points each)

x + 4+ x + x = x + x + 40

2x + 2x = 12


5x + 2 + x = 18 + x + x
6x + 2 = 18 + 2x
-2 -2
6x = 16 + 2x
-2x -2x
4x = 16
x = 4
2x = 7 + 5 + x
2x = 12
-x -x
1x = 12
x = 12
x + x + 6 + 2x = 3x + 5
4x + 6 = 3x + 5
-5 -5
4x + 1 = 3x
4x + 1 = 3x
-3x -3x
1x + 1
x = 1
x = 1
Part 4: Distributive Property- Expand each expression. (6 points each)
3(4 + 5)
3(4) + (5)
5 (4 + 6)
5(4) + (6)
3(8 + 6)
3(8) + (6)
2(4 + 6)
2(4) + (6)

Student 24
example II

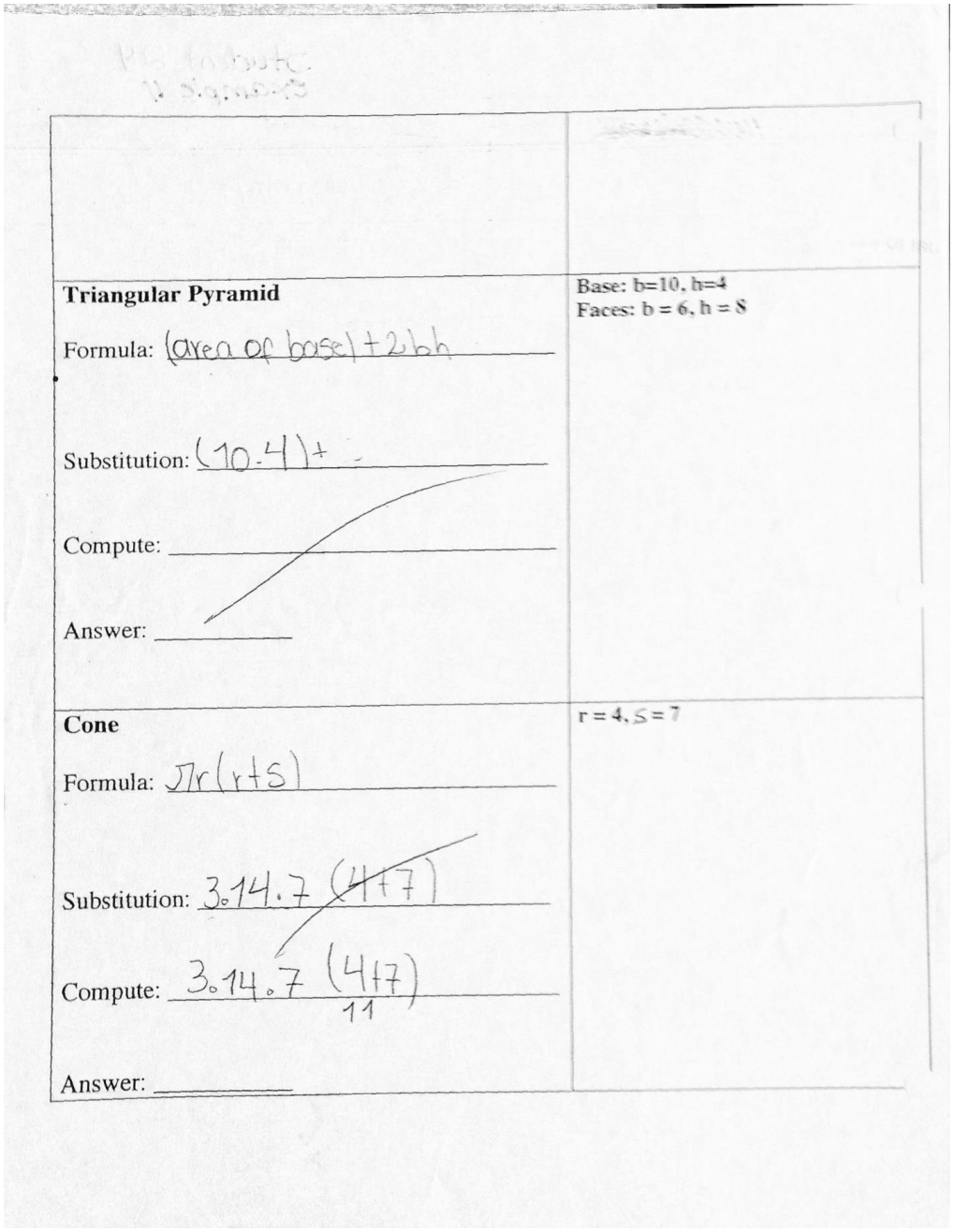
Name [redacted] Blk 2

Surface Area Review

Directions: Fill in the formula and use substitution to solve for the surface area.

21

Triangular Prism: Formula: bl+2(1/2bh)+bh Substitution: 12.5+2(5.4)+72.6 Compute: 60+20+72 Answer: 172	b=12, l=5, s=4, h=6
Square Based Prism: Formula: 2bh+lw Substitution: 2(4.8)+8.9 Compute: 32 Answer:	b and l=8, h=4, w=9



Triangular Pyramid Formula: (area of base) + 2bh Substitution: (10·4) + Compute: Answer:	Base: b=10, h=4 Faces: b = 6, h = 8
Cone Formula: $\pi r(r+s)$ Substitution: 3.14·7 (4+7) Compute: 3.14·7 (4+7) / 11 Answer:	r = 4, s = 7

Student 24
example 12

Name [redacted] Block 2+3 Points $\frac{}{64}$

Distributive Property Assessment

Part 1:
Draw a triangle around the variables and square around the constants. (3 points each= 6 total)

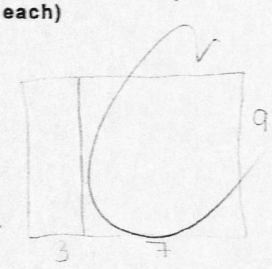
4x + 3x + 8 = 2 + x + 12

100%

2x + 3x + 3x = 4 + x

Part 2:
Draw an area model to represent the following equation:
(4 points each)

9(3+7)



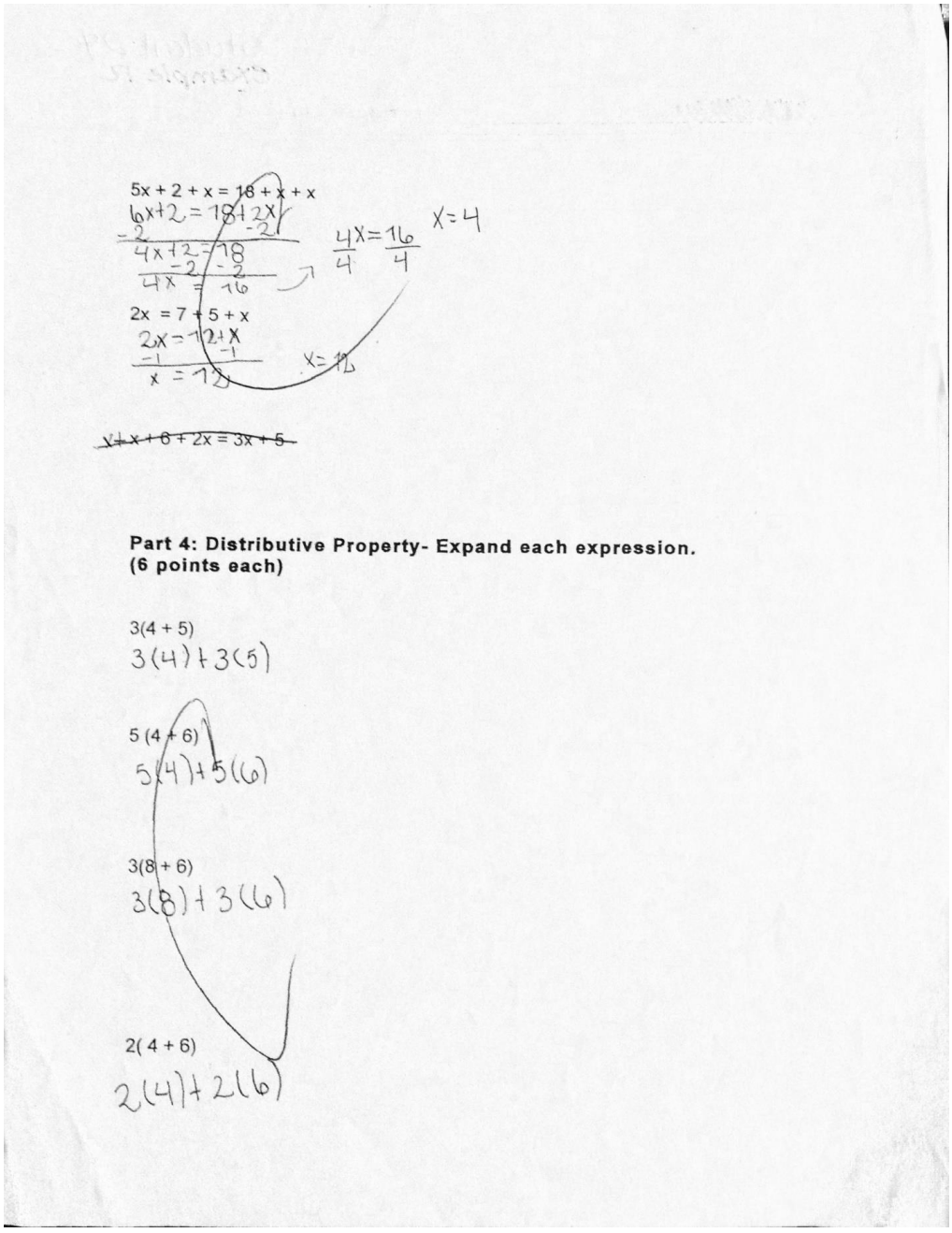
Part 3: Solve for x (6 points each)

x + 4 + x + x = x + x + 40

3x + 4 = 2x + 40
-2 -2
x + 4 = 40
-4 -4
x = 36

2x + 2x = 12

4x = 12
4 4
x = 3


5x + 2 + x = 18 + x + x
6x + 2 = 18 + 2x
-2 -2
4x + 2 = 18
-2 -2
4x = 16
4x = 16 / 4 X = 4
2x = 7 + 5 + x
2x = 12 + x
-1 -1
x = 12
X = 12
x + x + 6 + 2x = 3x + 5
Part 4: Distributive Property- Expand each expression. (6 points each)
3(4 + 5)
3(4) + 3(5)
5 (4 + 6)
5(4) + 5(6)
3(8 + 6)
3(8) + 3(6)
2(4 + 6)
2(4) + 2(6)

Western Connecticut State University
M.A.T. Electronic Professional Educator Portfolio
Teacher Work Sample Portfolio Component Rubric

Candidate: Name Date: July 1, 2013 **Please resubmit with suggested changes**

Rating / Indicator	1 - Unacceptable Indicator Not Met	2 - Acceptable Indicator Partially Met	3 - Target Indicator Fully Met	Score July 1, 2013	Score July 11, 2013
Section I. Contextual Factors The teacher candidate uses information about the learning/teaching context and student individual differences to set learning goals, plan instruction and assess learning.					
A Knowledge of Community, School and Classroom Factors	Teacher displays minimal, irrelevant, or biased knowledge of the characteristics of the community, school, and	Teacher displays some knowledge of the characteristics of the community, school, and classroom that may affect learning.	Teacher displays a comprehensive understanding of the characteristics of the community, school, and	**3**	
B Knowledge of Characteristics of Students	Teacher displays minimal, stereotypical, or irrelevant knowledge of student differences (e.g. development, interests, culture, abilities/disabilities)	Teacher displays general knowledge of student differences (e.g., development, interests, culture, abilities/disabilities) that may affect learning.	Teacher displays general & specific understanding of student differences (e.g., development, interests, culture, abilities/disabilities) that may affect learning.	**3**	
C. Implications for Instructional Planning and Assessment	Teacher does not provide implications for instruction and assessment based on student individual differences and community, school, and classroom characteristics OR provides inappropriate	Teacher provides general implications for instruction and assessment based on student individual differences and community, school, and classroom characteristics.	Teacher provides specific implications for instruction and assessment based on student individual differences and community, school, and classroom characteristics.	**3**	
II. Learning Goals The teacher candidate sets significant, challenging, varied, and appropriate learning goals.					
A. Significance, Challenge and Variety	Goals reflect only one type or level of learning.	Goals reflect several types or levels of learning but lack significance or challenge.	Goals reflect several types or levels of learning and are significant and challenging.	**revise**	

Rating / Indicator	1 - Unacceptable Indicator Not Met	2 - Acceptable Indicator Partially Met	3 - Target Indicator Fully Met	Score July 1, 2013	Score July 11, 2013
B. Clarity	Goals are not stated clearly and are activities rather than learning outcomes.	Some of the goals are clearly stated as learning outcomes.	Most of the goals are clearly stated as learning outcomes.	revise	
C. Appropriateness For Students	Goals are not appropriate for the development; pre-requisite knowledge, skills, experiences; or other student	Some goals are appropriate for the development; pre- requisite knowledge, skills, experiences; and other student needs	Most goals are appropriate for the development; pre-requisite knowledge, skills, experiences; and other	revise	
D. Alignment with National, State or Local Standards	Goals are not aligned with national, state or local standards.	Some goals are aligned with national, state or local standards.	Most of the goals are explicitly aligned with national, state or local	revise	
III. Assessment Plan The teacher candidate uses multiple assessment modes and approaches aligned with learning goals to assess student learning before, during and after instruction					
A. Alignment with Learning Goals and Instruction	Content and methods of assessment lack congruence with learning goals or lack cognitive complexity.	Some of the learning goals are assessed through the assessment plan, but many are not congruent with learning goals in content and cognitive	Each of the learning goals is assessed through the assessment plan; assessments are congruent with the learning goals in	2	
B. Clarity of Criteria and Standards for Performance	The assessments contain no clear criteria for measuring student performance relative to the learning goals	Assessment criteria have been developed, but they are not clear or are not explicitly linked to the learning goals	Assessment criteria are clear and are explicitly linked to the learning goals.	3	
C. Multiple Modes and Approaches	The assessment plan includes only one assessment mode and does not assess students before, during, and after instruction	The assessment plan includes multiple modes but all are either pencil/paper based (i.e. they are not performance assessments) and/or do not require the integration of knowledge, skills and reasoning ability.	The assessment plan includes multiple assessment modes (including performance assessments, lab reports, research projects, etc.) and assesses student performance	3	
D. Technical Soundness	Assessments are not valid; scoring procedures are absent or inaccurate; items or prompts are poorly written; directions and procedures are confusing to students.	Assessments appear to have some validity. Some scoring procedures are explained; some items or prompts are clearly written; some directions and procedures are clear to students.	Assessments appear to be valid; scoring procedures are explained; most items or prompts are clearly written; directions and procedures are clear to students.	3	

Rating / Indicator	1 - Unacceptable Indicator Not Met	2 - Acceptable Indicator Partially Met	3 - Target Indicator Fully Met	Score July 1, 2013	Score July 11, 2013
E. Adaptations Based on the Individual Needs of Students	Teacher does not adapt assessments to meet the individual needs of students or these assessments are	Teacher makes adaptations to assessments that are appropriate to meet the individual needs of some students.	Teacher makes adaptations to assessments that are appropriate to meet the individual needs of most	**3**	
IV. Design for Instruction The teacher candidate designs instruction for specific learning goals, student characteristics and needs, and learning contexts.					
A. Accurate Representation of Content	Teacher's use of content appears to contain numerous inaccuracies. Content seems to be viewed more as isolated skills and facts rather than as part of a	Teacher's use of content appears to be mostly accurate. Shows some awareness of the big ideas or structure of the discipline.	Teacher's use of content appears to be accurate. Focus of the content is congruent with the big ideas or structure of the discipline.	**3**	
B. Lesson and Unit Structure	The lessons within the unit are not logically organized organization (e.g., sequenced).	The lessons within the unit have some logical organization and appear to be somewhat useful in moving students toward achieving the learning goals.	All lessons within the unit are logically organized and appear to be useful in moving students toward achieving the learning goals.	**3**	
C. Use of a Variety of Instruction, Activities, Assignments and Resources	Little variety of instruction, activities, assignments, and resources. Heavy reliance on textbook or single resource (e.g., work sheets).	Some variety in instruction, activities, assignments, or resources but with limited contribution to learning.	Significant variety across instruction, activities, assignments, and/or resources. This variety makes a clear contribution to	**3**	
D. Use of Technology	Technology is inappropriately used OR teacher does not use technology, and no (or inappropriate) rationale is provided.	Teacher uses technology but it does not make a significant contribution to teaching and learning OR teacher provides limited rationale for not using technology.	Teacher integrates appropriate technology that makes a significant contribution to teaching and learning OR provides a strong rationale for not using	**2**	
V. Instructional Decision-Making Rubric The teacher candidate uses on-going analysis of student learning to make instructional decisions.					
A. Sound Professional Practice	Many instructional decisions are inappropriate and not pedagogically sound.	Instructional decisions are mostly appropriate, but some decisions are not pedagogically sound.	Most instructional decisions are pedagogically sound (i.e., they are likely to lead to student learning).	**3**	

Rating / Indicator	1 - Unacceptable Indicator Not Met	2 - Acceptable Indicator Partially Met	3 - Target Indicator Fully Met	Score July 1, 2013	Score July 11, 2013
B. Modifications Based on Analysis of Student Learning	Teacher treats class as "one plan fits all" with no modifications.	Some modifications of the instructional plan are made to address individual student needs, but these are not based on the analysis of student learning, best practice, or contextual factors.	Appropriate modifications of the instructional plan are made to address individual student needs. These modifications are informed by the analysis of student learning/performance, best practice, or contextual factors. Include explanation of why the modifications would	3	
C. Congruence Between Modifications and Learning Goals	Modifications in instruction lack congruence with learning goals.	Modifications in instruction are somewhat congruent with learning goals.	Modifications in instruction are congruent with learning goals.	3	
VI. Analysis of Student Learning **The teacher candidate uses assessment data to profile student learning and communicate information about student progress and achievement.**					
A. Clarity and Accuracy of Presentation	Presentation is not clear and accurate; it does not accurately reflect the	Presentation is understandable and contains few errors.	Presentation is easy to understand and contains no errors of	**Missing second assessment**	
B. Alignment with Learning Goals	Analysis of student learning is not aligned with learning goals.	Analysis of student learning is partially aligned with learning goals and/or fails to provide a comprehensive profile of student learning relative to the goals for the whole class, subgroups, and	Analysis is fully aligned with learning goals and provides a comprehensive profile of student learning for the whole class, subgroups, and two individuals.	**Missing second assessment**	
C. Interpretation of Data	Interpretation is inaccurate, and conclusions are missing or unsupported by data.	Interpretation is technically accurate, but conclusions are missing or not fully supported by	Interpretation is meaningful, and appropriate conclusions are drawn from the data.	**Missing second assessment**	
D. Evidence of Impact on Student Learning	Analysis of student learning fails to include evidence of impact on student learning in terms of numbers of students who achieved and made progress toward learning goals.	Analysis of student learning includes incomplete evidence of the impact on student learning in terms of numbers of students who achieved and made progress toward learning goals. Goals not	Analysis of student learning includes evidence of the impact on student learning in terms of number of students who achieved and made progress toward each learning	**Missing second assessment**	

Rating / Indicator	1 - Unacceptable Indicator Not Met	2 - Acceptable Indicator Partially Met	3 - Target Indicator Fully Met	Score July 1, 2013	Score July 11, 2013
VII. Reflection and Self-Evaluation The teacher candidate analyzes the relationship between his or her instruction and student learning in order to improve teaching practice.					
A. Interpretation of Student Learning	No evidence or reasons provided to support conclusions drawn in "Analysis of Student Learning" section.	Provides evidence but no (or simplistic, superficial) reasons or hypotheses to support conclusions drawn in "Analysis of Student Learning" section.	Uses evidence to support conclusions drawn in "Analysis of Student Learning" section. Explores multiple hypotheses for why some students did not meet	2	
B. Insights on Effective Instruction and Assessment	Provides no rationale for why some activities or assessments were more successful than others.	Identifies successful and unsuccessful activities or assessments and superficially explores reasons for their success or lack thereof (no use of theory or research).	Identifies successful and unsuccessful activities and assessments and provides plausible reasons (based on theory or research) for their success	3	
C. Alignment Among Goals, Instruction and Assessment	Does not connect learning goals, instruction, and assessment results in the discussion of student learning and effective instruction and/or the connections are irrelevant	Connects learning goals, instruction, and assessment results in the discussion of student learning and effective instruction, but misunderstandings or conceptual	Logically connects learning goals, instruction, and assessment results in the discussion of student learning and effective instruction.	Missing	
D. Implications for Future Teaching	Provides no ideas or inappropriate ideas for redesigning learning goals, instruction, and assessment.	Provides ideas for redesigning learning goals, instruction, and assessment but offers no rationale for why these changes would improve student learning.	Provides ideas for redesigning learning goals, instruction, and assessment and explains why these modifications would improve	Missing	
E. Implications for Professional Development	Provides no professional learning goals or goals that are not related to the insights and experiences described in this section.	Presents professional learning goals that are not strongly related to the insights and experiences described in this section and/or provides a vague plan for meeting the goals.	Presents a small number of professional learning goals that clearly emerge from the insights and experiences described in this section. Describes specific steps to meet these goals	Missing	
			Total Score	**48**	

Scoring Key Target = 70 - 84 Acceptable = 56 - 69 Unacceptable = 55 and Below (or any 1s)