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How to Use This Addenda

Make sure you're ready to teach by noting the **Necessary Materials and Pre-Lesson Prep** you will need to gather or complete prior to the lesson

Find high-leverage instructional moves in the **Lesson Look Fors**. This is what leaders

should see when observing your instruction

Note how your lesson objective ties to your state **Standards**

Plan purposeful questioning and responses using **Opportunities to CFU**

Plan to stress **Important Vocabulary** in the lesson. New vocab for the unit is indicated in bold

Note exemplar pacing in the **Lesson Agenda**

Use the **Mathematical Goal of the Lesson** to keep you focused on the appropriate student outcome

Plan instruction around what students need to Know & Do to be successful on the Exit Ticket using the identified **Student Criteria for Success**

Lesson 9: Find related multiplication facts by adding and subtracting equal groups in array models Date: _____

| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | | | |
|---|--|------------------|------|--------------------------------|-------|--------------|-------|--------------------------|--------|----------------------|--------|--------------------|-------|------------------|-------|--|
| <p>3.4K solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> (S) Multiply by 2 (1–5) Pattern Sheet (S) Personal white board (S) Three's array no fill template (S) Blank paper <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now (source: fluency #1)</td> <td>5 min</td> </tr> <tr> <td>II. Fluency*</td> <td>8 min</td> </tr> <tr> <td>III. Concept Development</td> <td>25 min</td> </tr> <tr> <td>IV. Student Practice</td> <td>15 min</td> </tr> <tr> <td>V. Student Debrief</td> <td>7 min</td> </tr> <tr> <td>VI. Exit Ticket*</td> <td>5 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson Students learn they can use decomposition to break one larger number into two smaller numbers as a strategy for multiplication. The goal of this lesson is simply for student to understand how to interpret and create an array that demonstrates such decomposition. Students will build on this understanding in subsequent lessons. This lesson also supports the goal of student thinking in terms of counting units, an overarching goal for academy math.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ Concept Development, by way of eliciting student responses ✓ Problems Set problems: #2, #3 <p>Other Notes to Inform Your Planning For Do Now: Use the Multiply by 2 (1–5) Pattern Sheet for your Do Now. 3 minutes for completion, 2 minutes whole group classwork check. For Fluency: Complete the Group Counting activity (notice the inclusion of 4s in preparation for upcoming lessons) and Forms of Multiplication activity. For Concept Development: Consider prepping personal whiteboard in advance. Spend no more than 12 minutes for CD Problem 1 and 13 minutes for CD Prob 2. For Student Practice: consider creating an extra set of Qs like 1-3 in case students struggle with entry-level understanding. If they don't, move on to Qs 4 and above. For Student Debrief: consider using the Eureka assigned Exit Ticket for whole group debrief exercise; Suggested strategy – guided discourse. For Exit Ticket: Use Homework problems 2 & 3 for this lesson's Exit Ticket.</p> <p><small>Though not formally discussed yet, this is a foundation to understanding of distributive property. Students visually see multiplying the sum of two or more addends by a number will give the same result as multiplying each addend individually by the number and then adding the products together.</small></p> | | Time | I. Do Now (source: fluency #1) | 5 min | II. Fluency* | 8 min | III. Concept Development | 25 min | IV. Student Practice | 15 min | V. Student Debrief | 7 min | VI. Exit Ticket* | 5 min | <p>Lesson Look Fors</p> <p>Look for teachers to...</p> <ul style="list-style-type: none"> □ Have established a signalling routine for choral response or work show during the respective fluency activities □ Use a think aloud to describe why they shade what portions of the array, or use a different symbol in the array □ Make the focus of the lesson understanding the visual representations <p>Look for students to...</p> <ul style="list-style-type: none"> □ Explain what they see in the array and how it relates to a given number sentence. <p>Student Criteria for Success</p> <ul style="list-style-type: none"> Shading, brackets, and/or dotted lines on an array will have mathematical significance -brackets can identify parts or wholes -dotted lines and shading represent decompositions We count units; in an array, counting rows is the same as counting units. Addition/subtraction and multiplication math facts (up to 4) Interpret an array -identify decompositions within an array -Relate an annotated or labeled array to one or more number sentences Addition/subtraction (+/- up to 4) Multiplication (2, 3, and 4) |
| | Time | | | | | | | | | | | | | | | |
| I. Do Now (source: fluency #1) | 5 min | | | | | | | | | | | | | | | |
| II. Fluency* | 8 min | | | | | | | | | | | | | | | |
| III. Concept Development | 25 min | | | | | | | | | | | | | | | |
| IV. Student Practice | 15 min | | | | | | | | | | | | | | | |
| V. Student Debrief | 7 min | | | | | | | | | | | | | | | |
| VI. Exit Ticket* | 5 min | | | | | | | | | | | | | | | |

Find recommended lesson modifications, content knowledge boosters, and/or high-leverage instructional moves that may not be in your Teacher Edition located in **Other Notes to Inform Your Planning**

UNIT SYNOPSIS

Throughout elementary, students built fluency solving multi-step expressions involving addition, subtraction, multiplication, and division. They also used properties such as commutative, identity, inverse, and distributive, though not always by name, to manipulate and simplify expressions. In 6th grade, students extended this work by encountering exponents for the first time and learning to simplify expressions fully using the order of operations. Unit 6 further deepened their algebraic thinking by introducing expressions, where students used properties of operations to test equivalence, simplify, and then to combining like terms.

Unit 7 builds directly from these foundations as students move into solving one-step equations and inequalities and graphing their solutions. This work is anchored in prior experiences with number comparisons, operations, and balance models, while extending the idea that some problems have a range of solutions rather than a single value. Teachers should help students make explicit connections between equations and inequalities, reinforcing that both require balance but inequalities allow for multiple solutions on a number line. Several models and strategies build throughout this unit to support conceptual understanding before abstract fluency. Students begin with balance scale models to visualize equations and, reinforcing the idea that what is done to one side must be done to the other. They also use tape diagrams and bar models to represent relationships between quantities, and number lines to display the set of possible solutions for inequalities. By Lesson 3, students transition into solving algebraically using inverse operations, applying the identity property by making the constant zero and the coefficient one to isolate the variable. In later lessons, they apply these strategies to real-world contexts, deciding whether to add, subtract, multiply, or divide in order to model situations accurately. Finally, students extend their understanding by distinguishing between solutions and non-solutions of inequalities and learning to represent these with open and closed circles when graphing.

Together, Units 6 and 7 form a critical bridge from arithmetic to algebra. They give students repeated opportunities to model with mathematics, explain their reasoning, and apply inverse operations across different contexts. These units ensure that students leave 6th grade with a strong foundation in solving and representing equations and inequalities, skills that will expand into two-step equations in 7th grade and more advanced algebra in later coursework.

Focus on Disciplinary Literacy



Mathematical Process Standard **(F)** – analyze mathematical relationships to connect and communicate mathematical ideas

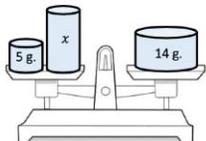
Mathematical Process Standard **(G)** – display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Topic A Overview – Equations

Topic A is 6th graders' introduction to algebraic equations. During this topic, students model and solve one-step algebraic equations, and they also begin to “translate” verbal situations into equations.

LESSON 1

③ The scale below is balanced. The left side contains a 5-gram cylinder and another cylinder with an unknown weight. The right side contains a 14-gram cylinder.



Ⓐ Write an equation to represent this situation.

$$5 + x = 14$$

Ⓑ What is this equation asking you?

What can you add to 5 to get 14?

Ⓒ How would you solve this equation?

Subtract 5 from both sides.

Ⓓ What is the value of x?

$$x = 9$$

⑤ The scale below is balanced. The left side of the scale has four blocks each with a value of -1. The right side has ten blocks, each with a value of +1.



Ⓐ Write an equation to represent this situation.

$$x - 4 = 10$$

Ⓑ What is the equation asking you?

What can you subtract 4 from to get 10?

Ⓒ How would you solve the equation?

add 4 to both sides

Ⓓ What is the value of x?

$$x = 14$$

LESSON 2

③ Each of the five blocks labeled with an “x” have the same value.



Ⓐ Write an equation to represent this situation.

$$5x = 10$$

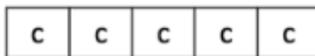
Ⓑ How would you solve this equation?

divide both sides by 5

Ⓒ What is the value of x?

$$x = 2$$

Ⓐ



Equation: $5c = 40$

Solution: $c = 8$

LESSON 3

We use inverse operations to isolate a variable.

| | | | |
|----------------|--|----------------|----------------|
| Addition | $\xrightarrow{\text{Inverse Operation}}$ | Subtraction | $x + 10$ |
| Subtraction | $\xrightarrow{\text{Inverse Operation}}$ | Addition | $x - 10$ |
| Multiplication | $\xrightarrow{\text{Inverse Operation}}$ | Division | $10x$ |
| Division | $\xrightarrow{\text{Inverse Operation}}$ | Multiplication | $\frac{x}{10}$ |

Equation

Ⓒ

$$x - 18 = 12$$

$$\begin{array}{r} + 18 \\ + 18 \\ \hline 0 \quad 30 \end{array}$$

$$x = 30$$

Ⓓ

$$\frac{3}{1} \cdot \frac{x}{3} = 5 \cdot 3$$

$$x = 15$$

LESSON 4

The Taylor family brought 6 suitcases with them on their trip to Italy. They paid \$72 to check their luggage in with the airport. What was the cost for each piece of luggage?

Variable: $L = \text{luggage}$

Equation: $6L = 72$

Solution: $L = 12$

Topic B Overview – Inequalities

Students used the $<$ and $>$ symbols to compare numbers in elementary, but in 6th grade, students first encounter the \leq and \geq symbols. They also learn how to graph inequalities on the number line. By the end of this topic, students can write one-step inequalities, solve them, and graph them on the number line.

LESSON 5

| Symbol | = | < | \leq | > | \geq |
|----------|---------------------|--|---|--|--|
| Meaning | Equal | Less than | Less than or equal | Greater than | Greater than or equal |
| Examples | $x = 5$ x is 5 | $x < 5$ x is any # less than 5 | $x \leq 5$ x is any # less than 5 or exactly 5 | $x > 5$ x is any # greater than 5 | $x \geq 5$ x is any # greater than 5 or exactly 5 |

To graph an inequality statement, you want to show all possible values of the variable on a number line.

○ → Open Circle: does NOT include ● → Closed Circle: INCLUDES

So, if $c \geq 1$, I would show all numbers "c" could be.

LESSON 7

Steps to solving a one-step inequality:

- 1.) Isolate the variable by performing the inverse operation.
- 2.) Balance the inequality by doing the same thing to the other side of the inequality.

LESSON 6

| Inequality | What it is asking | Possible Solutions | Non-Solutions | Summary of Solutions |
|---|---|--------------------|--------------------|---|
| $2 + b > 5$ -2 $-\frac{2}{3}$ $b > 3$ | What #s can be added to "2" to get a solution that is greater than "5"? | 4, 10, 25, 3.1 | 3, 2, 1, 0, -1 ... | Any number greater than 3 $b > 3$ |

① Consider the inequality $h + 5 > 12$

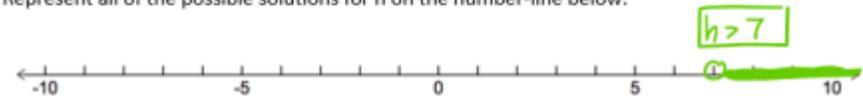
Ⓐ Make a list of five possible solutions for h

8, 9, 10, 11, 12

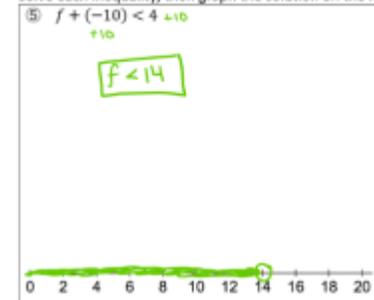
Ⓑ Make a list of five non-solutions for h.

7, 6, 5, 4, 3, 2

Ⓒ Represent all of the possible solutions for h on the number-line below:



Solve each inequality, then graph the solution on the number line.



CONTENT STANDARDS

Below are the standards addressed in this unit.

| Readiness Standards | Supporting Standards |
|--|--|
| ◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems | ◆ 6.10(B) determine if the given value(s) make(s) one-variable, one-step equations or inequalities true |

ROADMAP

| AT A GLANCE: Unit 7 – EQUATIONS AND INEQUALITIES | | | | |
|--|-----|------|--------|---|
| Topic | Day | Date | Lesson | Lesson Title |
| Topic A Equations | 1 | | 1 | Modeling One-Step Addition and Subtraction Equations |
| | 2 | | 2 | Modeling One-Step Multiplication and Division Equations |
| | 3 | | 3 | Solving One-Step Equations Using Inverse Operations |
| | 4 | | 4 | One-Step Equations Application |
| | 5 | | | Flex Day/ Topic Quiz 7 |
| Topic B Inequalities | 6 | | 5 | Writing and Graphing Inequalities |
| | 7 | | 6 | Solutions and Non-Solutions of Inequalities |
| | 8 | | 7 | Solving One-Step Inequalities |
| | 9 | | | Review |
| | 10 | | | UE7 |

| Lesson 1: Modeling One Step Addition and Subtraction Equations | | Date: _____ | | | | | | | | | | | | |
|--|--|--|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|--|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Slide <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>15 min</td> </tr> <tr> <td>III. Student Practice</td> <td>25 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to find the value of a missing quantity in a one-step addition or subtraction equation using different models. This lesson builds students' conceptual understanding of a one-step equation. Students learn how to find the value of a missing quantity when the value being added/subtracted is known. Various models and diagrams are used in this lesson to deepen student understanding.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #3-5 ✓ Student Practice: #1-4 <p>Other Notes to Inform Your Planning</p> <p>For Do Now: The Do Now will be an opportunity to check for understanding and quickly address misconceptions from the previous two lessons.</p> <p>For INM: It will be important to stamp that equations must “balance” and it is necessary to the same thing on both sides of the equal sign. Consider using manipulatives to support student understanding. Here is a link to virtual manipulatives.</p> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 15 min | III. Student Practice | 25 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Act as facilitators for INM rather than have students copy teacher writing; students can likely guide each other through the majority the INM <input type="checkbox"/> Actively monitor students as they work in pairs or groups to prevent misconceptions from developing <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Write out equations using the models <i>Ask: How did you get this equation?</i> <input type="checkbox"/> Use the inverse operation to find the missing value <i>Ask: Why did you choose to subtract here?</i> |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 15 min | | | | | | | | | | | | | |
| III. Student Practice | 25 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Balance ▪ Isolate ▪ One-step Equation ▪ Variable | <p style="text-align: center;">Focus on Disciplinary Literacy</p> <div style="text-align: center;">  <p>INM: #1-5 Student Practice: #1-7</p> </div> | <p>Student Know/Do Chart</p> <p> Explain, using a given model, why they are choosing to use a particular operation to solve a one-step addition or subtraction equation</p> <p> Write and solve a one-step addition or subtraction equation when given a model.</p> | | | | | | | | | | | | |

| Lesson 2: Modeling One-Step Multiplication and Division Equations | | Date: _____ | | | | | | | | | | | | |
|--|---|--|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|---|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Slide <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>20 min</td> </tr> <tr> <td>III. Student Practice</td> <td>20 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to find the value of a missing quantity in a one-step multiplication equation using different models. This lesson builds students' conceptual understanding of a how to find the value of a missing quantity when the value being multiplied by the missing quantity and the total value is known. Various models and diagrams are used in this lesson to deepen student understanding.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #4a-c, #5d-f, #6a, b ✓ Student Practice: #1-4 <p>Other Notes to Inform Your Planning For Student Practice: It is unlikely students will need 20 minute to complete the Student Practice. Extra time could be used to give students more practice with CLT, Distributive Property or Order of Operations. Consider pulling small groups during this time for students that struggled with Lesson 1 and the current lesson. Prompt them by asking, "What is happening to x? What can we do to get x by itself? How can we make that fair to the other side?"</p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Focus on Disciplinary Literacy</p>  <p>INM: #1-6 Student Practice: #1-7</p> </div> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 20 min | III. Student Practice | 20 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Act as facilitators for INM rather than have students copy teacher writing; students can likely guide each other through the majority the INM <input type="checkbox"/> Actively monitor students as they work in airs or groups to prevent misconceptions from developing. <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Write out equations using the models <i>Ask: How did you get this equation?</i> <input type="checkbox"/> Use the inverse operation to find the missing value <i>Ask: Why did you choose to subtract here</i> |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 20 min | | | | | | | | | | | | | |
| III. Student Practice | 20 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Balance ▪ Isolate ▪ One-step Equation ▪ Variable | | <p>Student Know/Do Chart</p> <p> Explain, using a given model, why they are choosing to use a particular operation to solve a one-step addition or division equation</p> <p> Write and solve a one-step multiplication or division equation when given a model.</p> | | | | | | | | | | | | |

| Lesson 3: One-Step Equations Using Inverse Operations | | Date: _____ | | | | | | | | | | | | |
|---|---|--|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|--|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Slide <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>25 min</td> </tr> <tr> <td>III. Student Practice</td> <td>15 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to solve one-step equations using inverse operations. In this lesson students will build an understanding of how and why it is necessary to use the inverse operations to isolate a variable in a one-step equation. This is the introduction to solving equations algebraically.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #5c-d, #7 ✓ Student Practice: #1-4 and #10-13 <p>Other Notes to Inform Your Planning For INM/Student Practice: Consider creating an anchor chart to model the steps to solve one-step equations. For examples of what you may decide to include see the snip under Topic A Lesson 3.</p> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 25 min | III. Student Practice | 15 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Model solving one-step equations by using the inverse operation <input type="checkbox"/> Connect what students learned about the Additive and Multiplicative Identity Properties to show what it means to “isolate” a variable. <input type="checkbox"/> Actively monitor students as they work in pairs or groups to prevent misconceptions from developing <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Solve one-step equations using the inverse operation (Ask, for ex: How did you find x?) <input type="checkbox"/> Confirm their solution by testing it. (Ask, for ex: How can you be sure that $x = -4$?) |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 25 min | | | | | | | | | | | | | |
| III. Student Practice | 15 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Coefficient ▪ Constant ▪ Inverse Operation ▪ Variable | <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Focus on Disciplinary Literacy</p>  <p>INM: #5,6,7</p> </div> <p>Expect students to have misconceptions when using the inverse operation to isolate the variable. It will be important to note students that may struggle with this lesson in the teacher exemplar. Consider working with those students in small groups or being intentional about marking their papers and providing individual feedback during the INM/Student Practice. This is an important concept for students to grasp as they will be solving equations for the rest of their math career. Ask: “What is happening to x?” “What can we do to get x by itself?” “How can we make that fair to the other side?” In 7th grade and beyond equations become more challenging.</p> | <p>Student Know/Do Chart</p> <p> Explain why inverse operations can be used to solve equations</p> <p> Use inverse operations to solve one-step equations</p> | | | | | | | | | | | | |

| Lesson 4: Applications of One-Step Equations | | Date: _____ | | | | | | | | | | | | |
|--|---|---|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|--|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Slide <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>22 min</td> </tr> <tr> <td>III. Student Practice</td> <td>18 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to write and solve one-step equations based on real-world situations. This lesson presents them with real-world problems in which they must write a one-step equations and solve the equation to find the solution. Students will have to decide if a problem involves a number added, subtracted, multiplied, or divided by a variable.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #1, 2, 5, 6 ✓ Student Practice: #2, 3, 4, 5 <p>Other Notes to Inform Your Planning For Do Now: Consider prioritizing #4-6; if time permits, students can finish the remaining portion of the Do Now. For INM: During the INM/Student Practice consider providing students with a chart of the inverse operations. If an anchor chart was created for the previous lesson students can use it as a reference. For every example, it will be important to stress why an operation was chosen to limit student misconceptions. This will also support students that may be behind grade level in reading. You may choose to pull students in a small group during the Student Practice. Consider providing students that are working independently with access to an answer key to check their answers after about 10 minutes into the independent practice so that they are able to assess their understanding as you are working with small groups.</p> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 22 min | III. Student Practice | 18 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Give a strong think-aloud for 1-2 examples. <input type="checkbox"/> Stamp the need to define a variable <input type="checkbox"/> Explain what parts of an equation correspond to certain parts of the word problem. <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Be able to justify how their equation aligns with the given situation. (<i>Ask</i>, for ex: How did you define the variable? Why does this operation represent the situation?) <input type="checkbox"/> Confirm their solution by testing it to see if it makes sense <input type="checkbox"/> (<i>Ask</i>, for ex: Your equation leads to a solution of \$18. Does that make sense in this situation?) |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 22 min | | | | | | | | | | | | | |
| III. Student Practice | 18 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Coefficient ▪ Constant ▪ Inverse Operation ▪ Rational Number ▪ Variable | <p>Focus on Disciplinary Literacy</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;">  <p>INM: #1-3 SP: #1-3 Student Debrief</p> </div> | <p>Student Know/Do Chart</p> <p> Write and solve one-step equations when given a real-world situation</p> | | | | | | | | | | | | |

| Lesson 5: Writing and Graphing Inequalities | | Date: _____ | | | | | | | | | | | | |
|---|--|--|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|---|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Question Slides <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>28 min</td> </tr> <tr> <td>III. Student Practice</td> <td>12 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to write and graph inequalities. Students will be introduced to the idea that there is a range of solutions, rather than one exact solution and it exists in certain situations. They will learn the difference between inequalities that include the given value and inequalities that do not include the given value. They will then learn how to represent an inequality on a number line.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #1a-c, #3b-d, #8 ✓ Student Practice: #2, #3, #4 <p>Other Notes to Inform Your Planning For INM/Student Practice: Students may struggle with determining whether to use $<$, $>$, \leq and \geq along with which circle, open or closed represents each symbol. It would be a great idea to include an anchor Chart for students to reference in the INM/Student Practice or you may decide to provide students who need it with a graphic organizer with the key words/phrases that match the inequality symbols along with how each phrase would be represented on a graph. See the snip under Topic B Lesson 5.</p> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 28 min | III. Student Practice | 12 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Activate students' prior knowledge of $<$ and $>$ <input type="checkbox"/> Connect students' prior knowledge of $<$ and $>$ to \leq and \geq. <input type="checkbox"/> Build a need for inequality symbols by showing that there are situations like INM #1 where $=$ don't make sense. <input type="checkbox"/> <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Be able to justify how they graphed an inequality (Ask, for ex: How did you know the circle should be open/closed? How did you know if you should shade right/left?) <input type="checkbox"/> Explain why an inequality makes sense in certain situations and an equal sign doesn't (Ask, for ex: Why can't we just use an $=$ sign in this situation) |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 28 min | | | | | | | | | | | | | |
| III. Student Practice | 12 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Closed Point ▪ Inequality ▪ Open Point ▪ $<$: Less than ▪ $>$: Greater Than ▪ \leq: Less than or Equal to ▪ \geq: Greater than or Equal to | <p style="text-align: center;">Focus on Disciplinary Literacy</p> <div style="display: flex; align-items: center;">  <p>INM: #4, 5, 8a-f SP: #4 Student Debrief</p> </div> | <p>Student Know/Do Chart</p> <ul style="list-style-type: none">  Graph inequalities on a number line  Graph inequalities on a number line  Write out an inequality to match a real-world situation | | | | | | | | | | | | |

| Lesson 6: Solutions and Non-Solutions of Inequalities | | Date: _____ | | | | | | | | | | | | |
|---|--|---|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|--------|--|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | Lesson Look Fors | | | | | | | | | | | | |
| <p>◆ 6.10(B) determine if the given value(s) make(s) one-variable, one-step equations or inequalities true</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Workbook ▪ Debrief Slide <p>Lesson Agenda</p> <table border="1"> <thead> <tr> <th></th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td>5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td>28 min</td> </tr> <tr> <td>III. Student Practice</td> <td>12 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td>5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td>10 min</td> </tr> </tbody> </table> <p>Mathematical Goal of this Lesson The primary goal of this lesson is for students to identify solutions and non-solutions of inequalities. Students will be introduced to the concept of solving one-step inequalities. They will be presented with a one-step inequality and must decide which numbers are possible solutions and which numbers are non-solutions. They then represent their answers on a number line.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #1a-b, #3a-b, #5d-g ✓ Student Practice: #2, #3-4 <p>Other Notes to Inform Your Planning For INM/Student Practice: It would be a great practice to note in your exemplar which students may struggle with certain examples in the INM/Student Practice so that you are able to be intentional during the lesson about addressing misconceptions with those specific students. Students who are not on grade level with reading or struggle with basic computation will struggle in this lesson. Provide them with a 12X12 Chart and plan to pull these students in small group during the Student Practice or seat them in close range so that you are able to provide individual feedback, mark papers, and address misconceptions in the moment. If a graphic organizer or anchor chart was created for the previous lessons on inequalities, allow students to have access to support their understanding throughout this lesson. Allow students who need it to label the tic marks on the number lines in the Student Practice to support their understanding. Note, this lesson ONLY focuses on finding solutions and non-solutions NOT whether students are able to solve for an unknown quantity.</p> | | Time | I. Do Now | 5 min | II. INM/Concept Development | 28 min | III. Student Practice | 12 min | IV. Student Debrief | 5 min | V. Exit Ticket | 10 min | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ensure students understand the general meaning of “solution” and “non-solution” before diving into the lesson <input type="checkbox"/> Use today’s lesson to reinforce students’ understanding of the difference between $<$ and \leq, and $>$ and \geq. <input type="checkbox"/> Allow students to “test” a possible solution to see if it works. <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Be able to justify whether a value is a solution or not. (<i>Ask, for ex: How do you know for sure that 7 is a solution?</i>) <input type="checkbox"/> Show possible solutions by graphing on the number line (<i>Ask, for ex: How could you show all the solutions on a number line?</i>) |
| | | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | | |
| II. INM/Concept Development | 28 min | | | | | | | | | | | | | |
| III. Student Practice | 12 min | | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | | |
| <p>Important Vocabulary</p> <ul style="list-style-type: none"> ▪ Closed Point ▪ Inequality ▪ Open Point ▪ Non-Solution ▪ Solution | <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Focus on Disciplinary Literacy</p>  <p>INM: #1-4 SP: #1, 2 Student Debrief</p> </div> | <p>Student Know/Do Chart</p> <ul style="list-style-type: none">  List solutions and non-solutions for an inequality  Represent the solutions of an inequality on a number line | | | | | | | | | | | | |

| Lesson 7: Solving One-Step Inequalities Algebraically | | Date: _____ | | | | | | | | | | | |
|---|--|-------------|--|------|-----------|-------|-----------------------------|--------|-----------------------|--------|---------------------|-------|----------------|
| Standard(s) | Notes for Intellectual Preparation & Lesson Planning | | | | | | | | | | | | |
| <p>◆ 6.10A Model and solve one-variable, one-step equations and inequalities that represent problems</p> | <p>Necessary Materials and Pre-Lesson Prep</p> <ul style="list-style-type: none"> ▪ Document Camera ▪ Projector ▪ Unit 7 Student Workbook ▪ Debrief Slide | | | | | | | | | | | | |
| | <p>Lesson Agenda</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%; text-align: center;">Time</th> </tr> </thead> <tbody> <tr> <td>I. Do Now</td> <td style="text-align: center;">5 min</td> </tr> <tr> <td>II. INM/Concept Development</td> <td style="text-align: center;">28 min</td> </tr> <tr> <td>III. Student Practice</td> <td style="text-align: center;">12 min</td> </tr> <tr> <td>IV. Student Debrief</td> <td style="text-align: center;">5 min</td> </tr> <tr> <td>V. Exit Ticket</td> <td style="text-align: center;">10 min</td> </tr> </tbody> </table> | | | Time | I. Do Now | 5 min | II. INM/Concept Development | 28 min | III. Student Practice | 12 min | IV. Student Debrief | 5 min | V. Exit Ticket |
| | Time | | | | | | | | | | | | |
| I. Do Now | 5 min | | | | | | | | | | | | |
| II. INM/Concept Development | 28 min | | | | | | | | | | | | |
| III. Student Practice | 12 min | | | | | | | | | | | | |
| IV. Student Debrief | 5 min | | | | | | | | | | | | |
| V. Exit Ticket | 10 min | | | | | | | | | | | | |
| Important Vocabulary | <p>Mathematical Goal of this Lesson</p> <p>The primary goal of this lesson is for student to solve one-step inequalities using the inverse operation. Students will be presented with a one-step inequality and must use inverse operations to make the constant zero and the coefficient 1. Last, students graph their solutions.</p> <p>Opportunities to CFU</p> <ul style="list-style-type: none"> ✓ INM: #3, 4, 5b, c, d ✓ Student Practice: #2, 3, 4, 6, 8, 11, 12 <p>Other Notes to Inform Your Planning</p> <p>For INM/Student Practice: To support student understanding provide students who need it access to an anchor chart or graphic organizer that has the inequality symbols along with how they would be represented when graphed on a number line. Students will be using the same steps to solve inequalities as they did for solving equations. If an anchor chart or graphic organizer was created that has operations and their inverse noted, allow students to have access to this as well. It will support them as their working through the steps to solve for the missing quantity in an inequality and then graphing it on a number line.</p> | | | | | | | | | | | | |
| | <div style="border: 1px solid black; padding: 5px; background-color: #fff9c4; display: inline-block;"> <p>Focus on Disciplinary Literacy</p>  <p>INM: #1, 2 Student Debrief</p> </div> | | | | | | | | | | | | |
| | Lesson Look Fors | | | | | | | | | | | | |
| | <p>Look for teachers to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Connect what students already know about using the inverse operation to solve one-step equations to make sense of solving one-step inequalities <input type="checkbox"/> Use today's lesson to reinforce students' understanding of using the inverse operation to solve equations and inequalities <input type="checkbox"/> Encourage students to "test" their solution set to see if they are correct. <p>Look for students to...</p> <ul style="list-style-type: none"> <input type="checkbox"/> Solve one-step inequalities using the inverse operation (<i>Look</i>: compare student work to an exemplar) <input type="checkbox"/> Be able to justify whether a value is a solution or not (<i>Ask</i>, for ex: How do you know for sure that 7 is a solution?) <input type="checkbox"/> Show possible solutions by graphing on the number line (<i>Ask</i>, for ex: How could you show all the solutions on a number line?) | | | | | | | | | | | | |
| | Student Know/Do Chart | | | | | | | | | | | | |
| | <p> Show possible solutions by graphing on the number line (<i>Ask</i>, for ex: How could you show all the solutions on a number line?)</p> <p> Represent an inequality's solutions on a number line</p> | | | | | | | | | | | | |

Recommended Success Day Materials and Resources

6.10A and 6.10B Equations and Inequalities

- 6.10A and 6.10B Practice with Inequalities
6.10A Practice with Equations
- 6.10A and 6.10B Tech-Enhanced Practice
 - Extra Practice SE
 - Extra Practice TE

Notes to Inform Your Planning

These resources can be used for either small-group or whole-group reteach.

If student data indicates a pause point is not necessary, you can opt to move forward and reserve a Success Day to use at a later date.

Using exit ticket data can help you prioritize what to review. For example, if you remember that students did poorly on Lesson 3, pull problems from lesson 3, especially if they are problems students did not do before (for example, SP or INM problems you skipped during class). You can also take questions from the resources linked above.

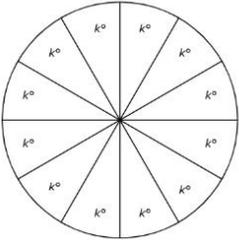
All unit exams should be given online to prepare students for STAAR online.

UNPACKED STANDARDS

Focus standards for this unit.

| Standards Breakdown | | |
|---|---|--|
| Standards | Specificity | Notes/Explanations/Examples |
| <p>6.10(A) model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts</p> | <p>Concepts:</p> <ul style="list-style-type: none"> Numeric and algebraic expressions One-step algebraic equations One-step algebraic inequalities <p>Skill:</p> <ul style="list-style-type: none"> Model solve <p>Including but not limited to:</p> <ul style="list-style-type: none"> Solving one-step equations and/or inequalities with positive rational numbers and/or negative integers. Graphing solutions to equations and inequalities on number lines Identifying solutions and non-solutions for equations and inequalities Generating an equation or inequality when given a real-world scenario and solving it <p>Limitations:</p> <ul style="list-style-type: none"> Although students will work with negative integers, they will not work with all negative fractions or decimals. <p>Vertical Alignment: In previous grades, students learned how to solve multi-step expressions, but 6th grade is the first time students are directly modeling and solving one-step equations and inequalities. In 7th grade, students will need to be able to model and solve two-step equations. In Algebra I and beyond, students will work with multi-step equations, inequalities, and polynomials.</p> | <p>2023 6G STAAR Q22</p> <div style="border: 1px solid black; padding: 5px;"> <p>2025 – Q22</p> <p>At a store, each avocado costs \$0.65. Which inequality represents the number of avocados, n, a customer can buy with \$10.00?</p> <p><input type="radio"/> A $0.65n \geq 10$</p> <p><input type="radio"/> B $10n \leq 0.65$</p> <p><input type="radio"/> C $0.65n \leq 10$</p> <p><input type="radio"/> D $10n \geq 0.65$</p> </div> <p>2024 6G STAAR Q5</p> <div style="border: 1px solid black; padding: 5px;"> <p>2024 – Q5</p> <p>An equation is shown.</p> $8x - 2x = 48$ <p>What is the solution to the equation?</p> <p><input type="radio"/> A $x = -8$</p> <p><input type="radio"/> B $x = \frac{1}{8}$</p> <p><input type="radio"/> C $x = 8$</p> <p><input type="radio"/> D $x = -\frac{1}{8}$</p> </div> |

Standards Breakdown

| Standards | Specificity | Notes/Explanations/Examples |
|-----------|-------------|--|
| | | <p>2023 6G STAAR Q17</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>2023 – Q17</p> <p style="text-align: center;">An inequality is shown.</p> <p style="text-align: center;">$9w < 108$</p> <p style="text-align: center;">What is the solution to this inequality?</p> <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓐ $w > \frac{1}{12}$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓑ $w < 12$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓒ $w < \frac{1}{12}$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓓ $w > 12$</div> </div> </div> <p>2023 6G STAAR Q35</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>2023 – Q35</p> <p style="text-align: center;">The face of a clock is a circle with 12 equal sections.</p> <div style="text-align: center;">  </div> <p style="text-align: center;">A circle has 360°. What is the value of k, the number of degrees in each section of the clock?</p> <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓐ $k = 12$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓑ $k = 48$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓒ $k = 30$</div> <div style="border: 1px solid #ccc; padding: 2px; text-align: center;">Ⓓ $k = 72$</div> </div> </div> |

Standards Breakdown

| Standards | Specificity | Notes/Explanations/Examples |
|---|--|---|
| <p>6.10(B) determine if the given value(s) make(s) one-variable, one-step equations or inequalities true</p> | <p>Concepts:</p> <ul style="list-style-type: none"> One-step equations and inequalities Solutions vs non-solutions $< > \geq \leq =$ <p>Skills:</p> <ul style="list-style-type: none"> determine <p>Including but not limited to:</p> <ul style="list-style-type: none"> testing solutions to see if they make equations and/or inequalities true <p>Vertical Alignment: In 6th grade, students test solutions for one-step, one variable equations and inequalities. In 7th grade, students test solutions for TWO-step, TWO variable equations and inequalities.</p> | <p>2025 6G STAAR Q4</p> <div style="border: 1px solid black; padding: 10px; margin-bottom: 10px;"> <p> 2025 – Q4</p> <p>Which inequality is true for all values of n where $n < -3$?</p> <p><input type="radio"/> A $n + 5 < -6$</p> <p><input type="radio"/> B $n + 5 > 3$</p> <p><input type="radio"/> C $n + 5 < -1$</p> <p><input type="radio"/> D $n + 5 < 3$</p> </div> <p>2024 6G STAAR Q1</p> <div style="border: 1px solid black; padding: 10px;"> <p>2024 – Q1</p> <p>Which equation is true when $x = 5$?</p> <p><input type="radio"/> A $2x = 10$</p> <p><input type="radio"/> B $3x = 35$</p> <p><input type="radio"/> C $x - 3 = 8$</p> <p><input type="radio"/> D $x - 5 = -10$</p> </div> |

Standards Breakdown

| Standards | Specificity | Notes/Explanations/Examples |
|-----------|-------------|---|
| | | <p>2023 6G STAAR Q23</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p>2023 – Q23</p> <p>Which equation is true when $y = \frac{6}{5}$?</p> <p style="margin-left: 20px;">Ⓐ $y + \frac{4}{5} = 2$</p> <p style="margin-left: 20px;">Ⓑ $1\frac{1}{6} - y = 0$</p> <p style="margin-left: 20px;">Ⓒ $0.2 + y = \frac{8}{5}$</p> <p style="margin-left: 20px;">Ⓓ $\frac{5}{6}y = 2$</p> </div> |

VERTICAL STANDARDS

This section details the **progression** of key student expectations/standards** in the courses **before** and **after** this course. This will help you understand what **prior knowledge skills to build upon** and guide you in knowing what **skills you are preparing your students** for in the subsequent course.

| 5 th grade | 6 th grade Mathematics | 7 th grade Pre-Algebra / 8 th grade Algebra I |
|---|---|---|
| <p>5.4(E) describe the meaning of parentheses and brackets in a numeric expression</p> <p>5.4(F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping</p> | <p>6.7(A) generate equivalent numerical expressions using order of operations, including whole number exponents, and prime factorization</p> | <p>A.10(A) add and subtract polynomials of degree one and degree two.</p> <p>A.10(B) multiply polynomials of degree one and degree two.</p> |
| | <p>6.7(D) generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties</p> | <p>A.10(D) rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property</p> |
| <p>5.4(B) represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity</p> | <p>6.10(A) model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts</p> | <p>7.10(A) model and solve one-variable, two-step equations and inequalities.</p> |
| | <p>6.9(B) represent solutions for one-variable, one-step equations and inequalities on number lines</p> | <p>7.10(B) represent solutions for one-variable, two-step equations and inequalities on number lines</p> |
| | <p>6.9(C) write corresponding real-world problems given one-variable, one-step equations or inequalities</p> | <p>7.10(C) write corresponding real-world problems given one-variable, two-step equation or inequalities</p> |
| | <p>6.10(B) determine if the given value(s) make(s) one-variable, one-step equations or inequalities true</p> | <p>7.11(B) determine if the given value(s) make(s) one-variable, two-step equations or inequalities true</p> |