Math Weekly Lesson Preparation Guide

Teacher Name: E. ADJEI, J. DOMFEH, S. ANYIMADU	**Grade:** Algebra 1
Week of: August 8.12- 8.23	**Unit:** Solving Equations and Inequalities **Lesson Numbers:** 1-1 to 1-4

Purpose: The Weekly Lesson Preparation Guide is to provide a structure that encourages teachers to think through and internalize the daily/weekly instructional expectations.

Planning Questions	**Lesson 1-1**	**Lesson 1-2**	**Lesson 1-3**	**Lesson 1-4**	
Do Now: **Topic Readiness Assessment can be given as well for the Do Now.**	Dates: 8.12-8.16 #1 , #2, #5, #8	Dates: 8.12-8.16 Solve the equation $4+\frac{3x-1}{2}=9$. Explain the reasons why you chose your solutions.	Date: 8.19- 8.23 Explain the solution to the follow equations. 1. 6x-12 = 6x -12 2. 6x-12 = 3x-12 3. 6x -18 = 6x-12	Date: 8.19- 8.23 What is the 1st step when solving A= bh for b? Explain your answer.	Practice Assessment Remediation Further Application
Standard(s): What is the focus of this lesson? Which specific Tennessee standards are being addressed in this lesson?	A1.A.REI.A.1	A1.A.REI.A.1 A1.A.REI.B.2 A1.A.CED.A.1	A1.A.REI.A.1 A1.A.REI.B.2 A1.N.Q.A.1 A1.A.CED.A.1	A1.A.CED.A.4	
Objective(s): What is the purpose of this lesson and how will this lesson prepare students for success on the unit assessment? How does it coherently connect to previous lessons and build to future ones?	Students will find the sum or product of two rational numbers and explain why the sum or product is rational. Students will find the sum or product of a rational and an irrational number and explain when the sum	Student will explain that each step in solving a linear equation follows from the equality in the previous step. Students will create and solve linear equations with one	Student will use the properties of equality to solve linear equations with a variable on both sides. Students will identify whether linear equations have one solution, infinitely	Student will rearrange formulas and equations to highlight a quantity of interest by isolating the variable using the same reasoning use to solve equations. Students will use formulas and	

Adapted from TDOE Unit and Lesson Preparation Guides

Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/

	or product is irrational.	variable using the properties of equality.	many solutions, or no solution.	equations to solve problems.	
How will this learning contribute to deep understanding of the essential ideas of the unit? What are the mathematical learning and performance goals of this lesson?	Students will understand that a problem can have multiple entry points and instruction should be focused on solving equations using reasoning that is centered around inverse operation, order of operation, and properties of operation.	Student will build procedural fluency from conceptual understand to solve absolute value inequalities when given an opportunity to connect the visual representation of the number line to the verbal concept of distance to the abstract symbolic form	Students will have the opportunity to work with equations and context that includes multiple methods of solving a system of linear equations in two variables which will include rational numbers in a real-world situation.	Students will understand that a relationship between two or more quantities can be expressed in multiple ways by writing equivalent equations.	
Modeling: Complete all tasks included in the lesson and review the sample/anticipated student responses. For each task consider: • What are the multiple solution paths students might take to solve this problem? • What is the purpose of this task? Specifically, which aspect(s) of rigor are being addressed (conceptual understanding, procedural fluency, and/or application)? How does this differ based on the solution path	Example #1 (Understand sets and subsets) Example #2 Compare and order Real Numbers Procedural Skill & Fluency, Conceptual Understanding Irrational Number Rational Number	Complete the model and Discussion exercise Procedural Skill & Fluency, Conceptual Understanding Equivalent Equations	1-3 Additional Practice Model #1-4 Procedural Skill & Fluency, Conceptual Understanding, Like terms	Model and Discuss Nora drew a nonsquare rectangle. Addition Practice #11 and #12 Procedural Skill & Fluency, Application Like terms	

Adapted from TDOE Unit and Lesson Preparation Guides

Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/

• Given this purpose, what key concepts and vocabulary might students need to understand to access the task? (Consider concepts and vocabulary from the prior grade that might need to be re- addressed)	Real Number Element of a Set Set Subset	Inverse Operation Isolate Solution of an Equation Variable	Properties of Equalities Solution of an Equation Identity	Properties of Equalities Solution of an Equation Identity	
Check For Understanding: What evidence of student learning will you look for to reveal understanding of the grade-level standard(s)? (refer to the Instructional Focus Document Evidence of Learning Statements)	1-1 Additional Practice #1- #5	Solve Linear Equations and Try It Ex #1 1-2 Additional Practice Solving Linear Equations #1, 2, 8, 10, 12	1-3 Additional Practice #5 CFU	Additional Problem #9 and #10	
Engagement: In what ways will students use the Standards for Mathematical Practice to develop mathematical understandings?	Attention to Precision Try It Exercise Aggressively Monitor to help shape grouping	Make Sense of Problem and Persevere in solving them Try It Exercise Aggressively Monitor to help shape grouping	Make Sense of Problem and Persevere in solving them Try It Exercise Aggressively Monitor to help shape grouping	Make Sense of Problem and Persevere in solving them Try It Exercise Aggressively Monitor to help shape grouping	
What supports will you build into the lesson to ensure all students have the opportunity to experience success in this grade level work? How can you ensure all students will have access to grade level opportunities in the lesson? (refer to the Instructional Focus Document's Instructional Focus Statements)	1-1 Mathematical Literacy and Vocabulary (Operations on Real Numbers)	1-2 Mathematical Literacy and Vocabulary	1-3 Mathematical Literacy and Vocabulary	1-4 Mathematical Literacy and Vocabulary (Literal Equations and Formulas)	
Check For Understanding: Where might your students struggle? What mathematical mistakes or misconceptions do you anticipate?	Vocabulary and Literacy	Vocabulary and Literacy	Vocabulary and Literacy	Vocabulary and Literacy	Always ensure that students understand the academic language embedded.

Adapted from TDOE Unit and Lesson Preparation Guides

Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/

Check For Understanding/Engagement: What skills/concepts and/or mathematical vocabulary may need reinforcement?	Practice #16-21 from Text page 9 List all subsets of the real numbers from the list below that each number belongs to Real Irrational Rational Integers Whole	Students will work the 3 problems from the "Reteach to Build Understanding" Worksheet can be upload to a Kahoot or Nearpod activity. Activity can be assigned through Savvas online platform.	Students will work the 10 problems from the "Reteach to Build Understanding" Worksheet can be upload to a Kahoot or Nearpod activity. Activity can be assigned through Savvas online platform.	Students will work the 3 problems from the "Reteach to Build Understanding" Worksheet can be upload to a Kahoot or Nearpod activity. Activity can be assigned through Savvas online platform.	
Check For Understanding/Engagement: What probing questions might you ask to encourage perseverance or push students to new understanding? What question would you use to elicit prior content knowledge, connect to students' experiences, and set up the task to ensure students understand the task without over-scaffolding or funneling? What questions might you ask to foster discussions around mathematical connections between anticipated student strategies?	How can you classify the results of operations on real numbers? Is the sum of a rational number and an irrational number is always irrational? Explain why the sum of a rational number and an irrational number is always irrational.	How do you create equations and use them to solve problems?	Why does it make sense to describe an equation that has infinitely many solutions as an identity?	How is the structure of the literate equation related to units for rates?	
Individual Student Learning, Group Learning and/or Student to Student Learning. Check For Understanding/Engagement:	Grouping will take place according to the daily Check for Understanding responses. Tier 1 Students will be group according to	Grouping will take place according to the daily Check for Understanding responses. Tier 1 Students will be group according to	Grouping will take place according to the daily Check for Understanding responses. Tier 1 Students will be group according to	Grouping will take place according to the daily Check for Understanding responses. Tier 1 Students will be group according to	

Adapted from TDOE Unit and Lesson Preparation Guides
Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/

How might you strategically group or partner students during discussion to support building understanding?	quick response and achievement of task. Tier 2 will be group according to minimum gaps in the learning. Tier 3 will work with teacher support and merge out into the other tier as understanding progress.	quick response and achievement of task. Tier 2 will be group according to minimum gaps in the learning. Tier 3 will work with teacher support and merge out into the other tier as understanding progress.	quick response and achievement of task. Tier 2 will be group according to minimum gaps in the learning. Tier 3 will work with teacher support and merge out into the other tier as understanding progress.	quick response and achievement of task. Tier 2 will be group according to minimum gaps in the learning. Tier 3 will work with teacher support and merge out into the other tier as understanding progress.	
How will you ensure that all students are responsible for this rigorous thinking?	Cold Calling Wait time Nearpod Activity Kahoot	Cold Calling Wait time Nearpod Activity Kahoot	Cold Calling Wait time Nearpod Activity Kahoot	Cold Calling Wait time Nearpod Activity Kahoot	
Closure/Assessment (Literacy Based) What strategy will you use to close the lesson? What assessment will be used to assess the learning?	Lesson summary will recap the days learning. Lesson Quiz	Lesson summary will recap the days learning. Lesson Quiz	Lesson summary will recap the days learning. Lesson Quiz	Lesson summary will recap the days learning. Lesson Quiz	
What mathematical tools, technology tool and/or concrete manipulatives will the teacher and students need to support mathematical understanding?	TI Graphing Calculator	TI Graphing Calculator	TI Graphing Calculator	TI Graphing Calculator	
SPED/ESL/504: What modifications are being made to accommodate the students receiving special services?	Small Group Support Classroom Proximity Assignment Modification Extended Time	Small Group Support Classroom Proximity Assignment Modification Extended Time	Small Group Support Classroom Proximity Assignment Modification Extended Time	Small Group Support Classroom Proximity Assignment Modification Extended Time	
Enrichment Activities: What will I do with students who understand quicker than others?	Students will work on the Enrichment Exercise (Magic Square)	Students will work on the Enrichment Exercise	Students will work on the Enrichment Exercise	Students will work on the Enrichment Exercise	

Adapted from TDOE Unit and Lesson Preparation Guides

Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/

Homework: If your lesson contains homework, how will you utilize the work? Will you need to send scaffolding notes home? Is there a strategy you can use to maximize homework?	Complete Additional Practice	Complete Additional Practice	Complete Additional Practice	Complete Additional Practice	
Lesson Materials: What additional materials do you need to prepare for this lesson?	Textbook Computer	Textbook Computer	Textbook Computer	Textbook Computer	
Formative Assessment How will you & your students know if they have successfully met the outcomes?	80% mastery on Lesson Quiz (4/5 questions correct)	80% mastery on Lesson Quiz	80% mastery on Lesson Quiz	80% mastery on Lesson Quiz	
Summative Assessment The assessment given to determine at a particular point what students know and can do.	2-week Unit Assessment				

Adapted from TDOE Unit and Lesson Preparation Guides

Click here to access 2023 Revised Math Standards Resources: https://bestforall.tnedu.gov/