Send as an attachment via email to adlerml@scsk12.org. Save file as: LessonPlans\_Last NameFirstInitial\_MonthDay

 Example: LessonPlans\_AdlerA\_Aug10

Boxes will expand as necessary when you type. Due by 11:59 Friday of week before scheduled plans.

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| Teacher | Teri Lindsey |
| Class | Algebra 1 |

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|  | **Date: 8-22** | **Date: 8-23** | **Date: 8-24** | **Date: 8-25** | **Date: 8-26** |
| **Standard**(Reference State, Common Core, ACT College Readiness Standards and/or State Competencies.) | Part 1[8.NS.A.1](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.Part 2■[8.EE.C.7](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Solve linear equations in one variable. | Part 1[8.NS.A.1](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.Part 2■[8.EE.C.7](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Solve linear equations in one variable. | Part 1[8.NS.A.1](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.Part 2■[8.EE.C.7](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Solve linear equations in one variable. | Part 1[8.NS.A.1](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.Part 2■[8.EE.C.7](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Solve linear equations in one variable. | Part 1* [8.NS.A.2](http://www.tn.gov/education/standards/math/std_math_gr_8.pdf): Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π2).

Part 2[7.NS.A.1.C](http://www.corestandards.org/Math/Content/7/NS/A/1/c/)Understand subtraction of rational numbers as adding the additive inverse, *p* - *q* = *p*+ (-*q*). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. |
| **Objective**(Clear, Specific, and Measurable, student-friendly) | I can follow a process to convert a repeating decimal to a fraction.I can solve a two-step equation using inverse operations. | I can follow a process to convert a repeating decimal to a fraction.I can solve a two-step equation using inverse operations. | I can convert a fraction to a decimal.I can convert a decimal (including a repeating decimal) to a fraction.I can solve one- and two-step equations. | I can convert a fraction to a decimal.I can convert a decimal (including a repeating decimal) to a fraction.I can solve one- and two-step equations. | I can determine whether a number is a perfect squareI can add and/or subtract rational numbers. |
| **Connections to Prior Knowledge** | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. |
| **Guiding Questions**(Motivator / HookAn Essential Question encourages students to put forth more effort when faced with complex, open-ended, challenging, meaningful and authentic questions.) | Part 1What is different about converting a repeating decimal to a fraction?Why doesn’t the same procedure work for converting both repeating and non-repeating decimals?Part 2* Algebraic equations are used to model real-life problems and represent quantitative relationships.
 | Part 1What is different about converting a repeating decimal to a fraction?Why doesn’t the same procedure work for converting both repeating and non-repeating decimals?Part 2Algebraic equations are used to model real-life problems and represent quantitative relationships | How are fractions and decimals related?Why are both fractions and decimals necessary? Why is it important to be able to simplify a fraction?Part 2Algebraic equations are used to model real-life problems and represent quantitative relationships  | How are fractions and decimals related?Why are both fractions and decimals necessary? Why is it important to be able to simplify a fraction?Part 2Algebraic equations are used to model real-life problems and represent quantitative relationships | * What is the relationship between squares and square roots? Cube and cube roots?

What is the relationship between subtraction and additive inverse? |

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| **Instructional Strategies**(Step-By-Step Procedures – SequenceDiscover / Explain – Direct InstructionModeling Expectations – “I Do”Questioning / Encourages Higher Order ThinkingGrouping StrategiesDifferentiated Instructional Strategies to Provide Intervention & Extension, **Literacy Task**) | Part 1* TTW model the procedure for converting a repeating decimal to a fraction.

Part 2* TTW present a real world problem requiring a two-step equation and use manipulatives to represent the situation.
* TTW guide students to discuss strategies for solving.
 | Part 1* TTW model more examples of converting a repeating decimal to a fraction.

Part 2* TTW model an example of an algebraic equation and use the manipulatives to illustrate it.
* TTW guide students to discover the steps in the written process to solve a two-step equation.
 | TTW briefly review skills in preparation for the upcoming test.Topics to be assessed:* Conversions between fractions and decimals.
* Solve one- and two-step equations.
 | TestStudents will take an assessment to determine their mastery of the foundational skills for working with rational numbers and solving equations. | Part 1* TTW arrange a set of manipulatives to form a square and guide a discussion to determine whether a square can be made from any random number of small squares.
* TTW introduce Square roots using this model.

Part 2* TTW present several varied examples of addition/subtraction of rational numbers and use manipulatives to develop the concept.
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| **Differentiated Tasks**(Activities based on students’ needs and learning styles, IEP modifications) | Part 1TTW guide students as they practice several examples of converting repeating decimals to fractions. Part 2TSW guide students to use manipulatives to solve 3-5 two-step equations. | Part 1TTW guide students as they practice several examples of converting repeating decimals to fractions.Part 2TTW guide students as they practice several examples of solving two-step equations | TSW work independently to practice foundational skills for working with rational numbers and equations. |  | Part 1TSW will work with a partner to investigate and make a chart to record findings.Part 2TTW model multiple examples, thinking aloud, then guiding students as they gradually become more independent.. |
| **Assessment** (Aligned with the Lesson ObjectiveFormative / SummativePerformance-Based/RubricFormal / Informal) | The student will correctly convert 0.3333…. to a fraction following the steps of a given procedure.Given the following scenario, TSW use manipulatives to determine how many juice pouches are in each box.There are 4 identical boxes of juice pouches and 17 extra juice pouches. The total number of pouches is 65. How many juice pouches are in each box? | The student will correctly convert 0.454545… to a fraction following the steps of a given procedure.The student will solve the following equation for *x*.3*x* + 5 = 17 | The student will correctly convert 0.232323… to a fraction following the steps of a given procedure.The student will solve the following equation for x.4x + 12 = 32 |  | The student will determine whether 12 is a perfect square.The student will evaluate:-3 - 5 |
| **Closure**(Reflection / Wrap-UpSummarizing, Reminding, Reflecting, Restating, Connecting) | The student will complete an exit ticket in the following format:3 Things I Learned About…2 Ways I Contributed to Class Today…1 Question I Still Have… | The student will complete an exit ticket in the following format:3 Things I Learned About…2 Ways I Contributed to Class Today…1 Question I Still Have… | The student will complete an exit ticket in the following format:3 Things I Learned About…2 Ways I Contributed to Class Today…1 Question I Still Have… | The student will complete an exit ticket in the following format:3 Things I Learned About…2 Ways I Contributed to Class Today…1 Question I Still Have… | The student will complete an exit ticket in the following format:3 Things I Learned About…2 Ways I Contributed to Class Today…1 Question I Still Have… |
| **Resources/Materials**(Aligned with the Lesson ObjectiveRigorous & Relevant) | Scientific calculatorsBoxes of juice pouchesCups and counters | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 |