Send as an attachment via email to [adlerml@scsk12.org](mailto: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 square  I 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 / Hook  An Essential Question encourages students to put forth more effort when faced with complex, open-ended, challenging, meaningful and authentic questions.) | Part 1  What 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 1  What 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 | 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 2  Algebraic 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 2  Algebraic 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 – Sequence  Discover / Explain – Direct Instruction  Modeling Expectations – “I Do”  Questioning / Encourages Higher Order Thinking  Grouping Strategies  Differentiated 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. | Test  Students 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. |
| **Differentiated Tasks**  (Activities based on students’ needs and learning styles, IEP modifications) | Part 1  TTW guide students as they practice several examples of converting repeating decimals to fractions.  Part 2  TSW guide students to use manipulatives to solve 3-5 two-step equations. | Part 1  TTW guide students as they practice several examples of converting repeating decimals to fractions.  Part 2  TTW 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 1  TSW will work with a partner to investigate and make a chart to record findings.  Part 2  TTW model multiple examples, thinking aloud, then guiding students as they gradually become more independent.. |
| **Assessment**  (Aligned with the Lesson Objective  Formative / Summative  Performance-Based/Rubric  Formal / 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-Up  Summarizing, 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 Objective  Rigorous & Relevant) | Scientific calculators  Boxes of juice pouches  Cups and counters | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 | Holt McDougal, Mathematics Course 3 |