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 | 8th Math |

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|  | **Date: 8-29** | **Date: 8-30** | **Date: 8-31** | **Date: 9-1** | **Date: 9-2** |
| **Standard**  (Reference State, Common Core, ACT College Readiness Standards and/or State Competencies.) | 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. | 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.2.C  Apply properties of operations as strategies to multiply and divide rational numbers. | 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  7.NS.A.2.C  Apply properties of operations as strategies to multiply and divide rational numbers. | 8.EE.C.7  Solve linear equations in one variable. | 8.EE.C.7  Solve linear equations in one variable. |
| **Objective**  (Clear, Specific, and Measurable, student-friendly) | I can determine whether a number is a perfect square and find or approximate its square root.  I can add and/or subtract rational numbers. | I can determine the location of rational and irrational numbers on a number line  I can multiply and/or divide rational numbers. | I can determine whether a number is rational or irrational.  I can multiply and/or divide rational numbers. | I can solve a two-step equation. | I can solve a two-step equation. |
| **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.) | * What is the relationship between squares and square roots? Cube and cube roots?   What is the relationship between subtraction and additive inverse? | * What is the relationship between squares and square roots? Cube and cube roots?   What is the relationship between division and multiplicative inverse? | * How can I estimate the value of an irrational number in order to locate it on a number line. * What is the relationship between division and multiplicative inverse? | * Algebraic equations are used to model real-life problems and represent quantitative relationships. * Is there a value of 𝑥 that makes the linear equation true? | * Algebraic equations are used to model real-life problems and represent quantitative relationships. * Is there a value of 𝑥 that makes the linear equation true? |

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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 guide students to recall square roots from the previous lesson. * TTW demonstrate drawing a square and partitioning it into unit squares to determine square roots and to distinguish between rational and irrational numbers.   Part 2   * TTW model several examples of adding/subtracting rational numbers, and guide students to verbalize the steps involved in determining the solution. | Part 1   * TTW model and think aloud to place rational and irrational numbers on a number line.   Part 2   * TTW model several examples of multiplying/dividing rational numbers and guide students to verbalize the steps involved in determining the solution. | Part 1   * TTW present several numbers and think aloud to determine which are rational and which are irrational, asking for input from students in making the determination.   Part 2   * TTW present several examples of expressions with mixed operations and model the process to simplify, asking for input from students about dealing with signed numbers. | * TTW use concrete models to develop an understanding of the concept of a two-step equation. * TTW guide students to verbalize strategies for determining the unknown number. | TTW model several examples of various types of two-step equations. |
| **Differentiated Tasks**  (Activities based on students’ needs and learning styles, IEP modifications) | Part 1  TTW guide students as they determine whether a number is rational or irrational  Part 2  TTW model multiple examples, thinking aloud, then guiding students as they gradually become more independent adding/subtracting rational numbers. | Part 1  TTW guide students as they practice locating rational and irrational numbers on a numberline.  Part 2  TTW guide students as they practice multiplying and dividing positive and negative rational numbers. | Part 1  TSW work with a partner to complete a card sort to determine which numbers are rational and which are irrational.  Part 2  TTW guide students as they practice simplifying expressions with mixed operations. | * TSW create a 2-step equation and exchange with a partner to solve | * TTW guide students as they practice solving two-step equations. |
| **Assessment**  (Aligned with the Lesson Objective  Formative / Summative  Performance-Based/Rubric  Formal / Informal) | The student will determine whether 28 is a perfect square.  The student will evaluate:  -4 – (-6) | The student will correctly locate on a number line.  The student will evaluate:  -5(-8) | The student will correctly determine whether is rational, or irrational.  The student will correctly simplify: | The student will solve the following equation: | The student will solve the following equation: |
| **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) | Holt McDougal, Mathematics Course 3  Paper/pencil  Manipulatves  Scientific calculator  Whiteboards/markers  Document camera/projector | Holt McDougal, Mathematics Course 3  Paper/pencil  Manipulatves  Scientific calculator  Whiteboards/markers  Document camera/projector | Holt McDougal, Mathematics Course 3  Paper/pencil  Manipulatves  Scientific calculator  Whiteboards/markers  Document camera/projector | Holt McDougal, Mathematics Course 3  Paper/pencil  Manipulatves  Scientific calculator  Whiteboards/markers  Document camera/projector | Holt McDougal, Mathematics Course 3  Paper/pencil  Manipulatves  Scientific calculator  Whiteboards/markers  Document camera/projector |