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| **Essential Components of Each Lesson:** | **Linear Equations** |
| **SOL # and Letter:**  **The student will:**  Remember the verbs! | 8.15 The student will  a) solve multistep linear equations in one variable with the variable on one and two sides of the equation;  b) solve two-step linear inequalities and graph the results on a number line; |
| **Resources used:** | * Interactive Achievement Pre-Assessment & Post-Assessment * Tablet & Projector * Khan Academy® * YouTube® (Khan Videos) * Hands-On Equations® * Big Ideas Math 8 Text® * Big Ideas Math 8 Record and Practice Journal® |
| **Lesson Progression:**  Is there a warm up?  What does the lesson looks like? Is it differentiated? If so, how?  Specific examples of effective instructional strategies. | **Day 1**  Pre-Assessment – SOL 8.15 Quiz (Interactive Achievement)  **Day 2**  Students are introduced to linear equations as a group using the tablet and projector on the white board.  *Math Rap Dougie: Teach Me How to Solve It*  <https://www.youtube.com/watch?v=oIxxqztQz3Y>  Notes are saved on OneNote for absent students.  \*\*Students that demonstrate an understanding of the earlier steps progress to more advances levels.\*\*  Lessons progress through the follow subtopics in a teach/practice format:  **One-Step Equations**  Examples Requiring Multiplication  = 8  Student Practice – In Class  Homework – One-Step Equation Requiring Multiplication  **Day 3**  **One-Step Equations**  Examples Requiring Division    Student Practice – In Class (Multiplication & Division)  Homework – One-Step Equations Requiring Multiplication or Division  **Day 4**  **Two-Step Equations**  Introduce - **OOOs** – Opposite Order of Operations – Do the Order of Operations in reverse order.  Review – **G.E.M.S.**  G – Grouping Symbols  E – Exponents  M - Multiply & Divide in one step from Left to Right.  S – Subtract & Add in one step from Left to Right.  Remember - “When girls see pretty **GEMS** they will say lots of, ’**OOOs**.’”  Examples      Student Practice – Two-Step Equations (In Class)  Homework – Two-Step Equations  **Day 5**  Groups based on level of understanding.  **GREEN** - Group one has a clear understanding of the concept.  **YELLOW** - Group two is pretty sure but would like to review.  **RED** – Group three is lost and needs remediation.  **RED** – Works with the teacher reviewing the content. A smaller group allows for more individualized attention, and the teacher has the opportunity to see exactly where the student is struggling. Hands-On Equations® Student Kits are used to provide a visual of the concepts being taught.  **YELLOW** – Works on Khan Academy® on assigned skills: *One-Step Equation Intuition*, *One-Step Equations*, and *One-Step Equations with Multiplication*.  **GREEN** – Works in pairs or individually to complete *One-Step Equation Maze A* and *One-Step Equation Maze B*.  **Day 6**  **Variable on Both Sides of the Equal Sign**  Examples    Helpful Video:  <https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-solving-equations/cc-8th-linear-equations/v/multi-step-equations-1>  Student Practice – Variable on Both Sides of the Equal Sign (In Class)  Homework – Mixed Review of All the Skills  **Day 7**  **Distributing**  Examples      Helpful Video:  <https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-solving-equations/cc-8th-equations-distribution/v/equation-special-cases>  Student Practice – Distributing (In Class)  Homework – Mixed Review of All the Skills |
| **Teacher Assessments /Checking for Understanding:**  How will you know what students came away knowing? | Daily homework checks for accuracy.  Post-Assessment – SOL 8.15 Quiz (Interactive Achievement) |