| Grade Level 9th Algebra IA |  | Teacher/Room: S. Pinson/Room 182 | Week of: September 5-9, 2016 |  |
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| Unit Vocabulary: see attached |  |  |  |  |
| Instructional Strategies Used: direct instruction, independent study, interactive instruction, partners |  |  |  |  |
| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|  | Common Core Standard(s): MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. | Common Core Standard(s): <br> MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. | Common Core Standard(s): MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. | Common Core Standard(s): MGSE9-12.A.CED. 1 Create equations and inequalities in one variable and use them to solve problems. |
|  | EQ Question: How do you solve inequalities? | EQ Question: How can you create and solve equations in real life applications? | EQ Question: How can you create and solve inequalities in real life applications? | EQ Question: What is a compound inequality, and how do you solve one? |
| Labor <br> Day Holiday | Mini Lesson: USA Test Prep Computer Lab <br> Activating Strategies: Properties of Equality - Which ones apply to inequalities? <br> Lesson: Solving Inequalities <br> 1. Review Properties with Power Pt <br> 2. Review inequalities and their graphs <br> 3. Power point with guided notes <br> 4. Guided Practice <br> 5. Assignment <br> 6. Hand out Friday WS <br> Resource/Materials: <br> Powerpoint, guided notes, worksheets, logins | Mini Lesson: Properties of Equality <br> Activating Strategies: <br> Right/Wrong: Given a solution, students need to decide if an inequality was solved correctly. <br> Lesson: Creating Equations from Context <br> 1. Review Translating Verbal to Algebraic <br> 2. Guided Practice on Creating Equations <br> 3. Assignment <br> Resource/Materials: <br> Powerpoint, tests | Mini Lesson: USA Test Prep Computer Lab <br> Activating Strategies: Pair <br> Activity - Expressions Card Sort <br> Lesson: Creating Inequalities from Context <br> 1. Notes <br> 2. Guided Practice Problems on Creating Inequalities <br> 3. Assignment <br> 4. Ticket-out-the-door <br> Resource/Materials: <br> Powerpoint, worksheets | Mini Lesson: Order of Operations <br> Activating Strategies: Person <br> Puzzle - Bethany Hamilton (Solving Eqns with Decimals) - partners <br> Lesson: Compound Inequalities <br> 1. Collect Friday Worksheet <br> 2. Quiz over Friday WS <br> 3. Guided practice over justifying <br> 4. Assignment <br> Resource/Materials: Quizzes, worksheets |
|  | Differentiation: <br> Content/Process/Product: Guided Practice, USATestPrep Grouping Strategy: Assessment: | Differentiation: <br> Content/Process/Product: Grouping Strategy: Assessment: | Differentiation: <br> Content/Process/Product: card sort, USA Test Prep Grouping Strategy: partners Assessment: informal | Differentiation: <br> Content/Process/Product: graphic organizer <br> Grouping Strategy: partners Assessment: Friday WS |
|  | Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: thumbs up/down Summative: | Assessment : <br> Formative: ticket-out-door Summative: | Assessment : <br> Formative: thumbs up/down, quiz Summative: |
|  | Homework: Day 5 Solving Linear Inequalities WS | Homework: Day 6 Creating <br> Equations WS | Homework: WS: Day7 Creating Inequalities | Homework: WS: Compound Inequalities |

- Algebra: The branch of mathematics that deals with relationships between numbers, utilizing letters and other symbols to represent specific sets of numbers, or to describe a pattern of relationships between numbers.
- Binomial Expression: An algebraic expression with two unlike terms.
- Capacity: The greatest volume that a container can hold. - Circumference: The distance around a circle.
- Coefficient: A number multiplied by a variable.
- Constant Term: A quantity that does not change its value.
- Expression: A mathematical phrase involving at least one variable and sometimes numbers and operation symbols.
- Factor: When two or more integers are multiplied, each integer is a factor of the product. "To factor" means to write the number or term as a product of its factors.
- Integer: The set of numbers ...,-3,-2,-1,0,1,2,3,...
- Irrational Number: A number whose decimal form is nonterminating and nonrepeating. Irrational numbers cannot be written in the form $a / b$, where $a$ and $b$ are integers (b cannot be zero). So all numbers that are not rational are irrational.
- Monomial Expression: An algebraic expression with one term.
- Perimeter: The sum of the lengths of the sides of a polygon.
- Rational Number: A number expressible in the form $a / b$ or $-a / b$ for some fraction $a / b$. The rational numbers include the integers.
- Standard Form of a Polynomial: To express a polynomial by putting the terms in descending exponent order.
- Term: A number, a variable, or a product of numbers and variables.
- Trinomial: An algebraic expression with three unlike terms.
- Variable: A letter or symbol used to represent a number.
- Volume: The amount of space occupied by an object.
- Whole numbers: The numbers $0,1,2,3, \ldots$.

