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|  Grade Level 9th Algebra I support | **Teacher/Room**: L. Payne/Room 181 Week of: September 12 – September 16, 2016 |
| **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. | **GSE/GPS Standard(s)**:**MGSE9-12.A.REI.3** Solve linear equations and inequalities in one variable including equations with coefficients represented by letters | **GSE/GPS Standard(s)**:**MGSE9-12.A.REI.3** Solve linear equations and inequalities in one variable including equations with coefficients represented by letters | **GSE/GPS Standard(s)**:All that we have covered so far. | **GSE/GPS Standard(s)**:All that we have covered so far. |
| **EQ Question**: How can you create and solve inequalities in real life applications? | **EQ Question**: How can you solve for a given variable in a formula or equation with more than one variable? | **EQ Question**: How can you solve for a given variable in a formula or equation with more than one variable? | **EQ Question**: All that we have covered so far. | **EQ Question**: All that we have covered so far. |
| **Mini Lesson**: Order of Operations**Activating Strategies:** Pair Activity – Expressions Card Sort**Lesson:** Creating Inequalities from Context (continued)1. Guided Practice Problems on Creating Inequalities
2. Assignment

**Resource/Materials:** Powerpoint, worksheets, card sort | **Mini Lesson:** Computer Lab**Activating Strategies:** Solving Equations**Lesson:** Solving for a variable1. PPT (Keeper 6) with guided notes
2. Guided Practice Problems
3. Assignment

**Resource/Materials:** Powerpoint, worksheets | **Mini Lesson:** Error Analysis – Solving Formulas**Activating Strategies:** Solving Equations**Lesson:** Solving for a variable1. Partners – Rearranging Old Friends
2. Start Reviewing for Friday’s test
3. Assignment – Review Sheet

**Resource/Materials:** Powerpoint, worksheets, review sheets | **Mini Lesson:** Computer Lab**Activating Strategies:** Ask the teacher questions**Lesson**: Review1. Go over Review Sheet
2. More Problems ppt
3. Jeopardy (groups)[**https://jeopardylabs.com/play/coordinate-algebra-unit-1**](https://jeopardylabs.com/play/coordinate-algebra-unit-1)

**Resource/Materials:** Review Sheets, Power point, internet | **Mini Lesson**: 24**Activating Strategies:** Ask the teacher questions**Lesson**: Review and Test1. Collect Friday WS
2. Quick Review
3. **Test**: Unit 1A

**Resource/Materials:** tests |
| **Differentiation:***Content/Process/Product:* card sort*Grouping Strategy:* partners*Assessment:* Friday quiz | **Differentiation:***Content/Process/Product:* guided notes, USATestPrep*Grouping Strategy:* *Assessment:*  | **Differentiation:***Content/Process/Product:* *Grouping Strategy:* heterogeneous*Assessment:* informal | **Differentiation:***Content/Process/Product:**Grouping Strategy:* Random*Assessment:*  | **Differentiation:***Content/Process/Product:**Grouping Strategy:**Assessment:* |
| **Assessment :***Formative:* thumbs up/down*Summative:*  | **Assessment :***Formative:* thumbs up/down, USATestPrep*Summative:*  | **Assessment :***Formative:* thumbs up/down*Summative:*  | **Assessment :***Formative:* thumbs up/down, USATestPrep*Summative:*  | **Assessment :***Formative:* thumbs up/down*Summative:* **Unit 1A Test** |
| **Homework:** WS: Inequality Word Problems and Solving Inequalities Practice | **Homework:** WS: Day8Isolating a Variable | **Homework:** WS : Day9 Solving Formula for a Variable | **Homework:** review sheet | **Homework:** none |

**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.

**Polynomial function**: A polynomial function is defined as a function, f(x)= ao x n + a1 x n-1 + a2 x n-2 + … + an-2 x 2 + an-1 x 1 + an , where the coefficients are real numbers.

**Pythagorean Theorem**: It is a theorem that states a relationship that exists in any right triangle. If the lengths of the legs in the right triangle are a and b and the length of the hypotenuse is c, we can write the theorem as the following equation: a 2 + b 2 = c 2.

**Radical**: The symbol,$\sqrt[b]{a}$ , which is read "the bth root of a," is called a radical.

**Radicand**: The number underneath the root symbol.

**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, ….