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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 variable   1. 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 variable   1. 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**: Review   1. 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 Test   1. 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, , 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, ….