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| Grade Level 9th Algebra I Support | | **Teacher/Room**: L. Payne/Room 181 Week of: September 26– September 30, 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** |
| **GSE/GPS 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.CED.1** Create equations and inequalities in one variable and use them to solve problems. | | **GSE/GPS Standard(s)**:  **MCC9-12.N.Q.3** Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. | **GSE/GPS Standard(s)**:  All that we have covered so far. | **GSE/GPS Standard(s)**:  **MGSE9-12.A.CED.2** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. |
| **EQ Question:** How can you create proportions and use them to solve problems? | **EQ Question:** How can you create proportions and use them to solve problems? | | **EQ Question**: How can you choose appropriate levels of precision and accuracy when solving problems? | **EQ Question**: All that we have covered so far. | **EQ Question**:  How do I graph equations on coordinate axes with the correct labels and scales? |
| **Mini Lesson:** Solving Proportions  **Activating Strategies:** How much do these people make each week, knowing how long it takes them to make $1000.  **Lesson: Applications of Proportions**   1. Powerpoint (Book 2-1 Rates…) with Cornell Notes 2. Guided Practice Problems 3. Assignment –Worksheets   **Resource/Materials:** Powerpoint, worksheets | **Mini Lesson**: Error Analysis – Solving Equations  **Activating Strategies:** Anticipation Guide  **Lesson: Applications of Proportions and Dimensional Analysis**   1. Finish Applications of Proportions (PPT Book 2-2 and Cornell Notes) 2. Classwork: WS on Applications (Practice A-Day10) 3. Notes – Keeper 1, with Cornell Notes 4. Guided Practice Problems 5. Assignment –Worksheets   **Resource/Materials:** Powerpoint, worksheets, Anticipations Guide | | **Mini Lesson:** Solving Proportions  **Activating Strategies:** Error Analysis – Dimensional Analysis  **Lesson: Precision and Accuracy**   1. Finish Dimensional Analysis 2. Classwork: More Practice on Dimensional Analysis (WS More Dimensional Analysis-Day 11) 3. PPT – Precision and Accuracy (Book 2-3) 4. Practice Problems 5. Assignment – WS   **Resource/Materials:** Powerpoint, Worksheets | **Mini Lesson:** Error Analysis **-** Solving Formulas  **Activating Strategies:** Ask the teacher questions  **Lesson**: Review   1. More Problems ppt 2. Jeopardy (groups)[**https://jeopardylabs.com/play/coordinate-algebra-unit-1**](https://jeopardylabs.com/play/coordinate-algebra-unit-1) 3. Quiz   **Resource/Materials:** Review Sheets, Power point, internet | **Mini Lesson:** Pre-test  **Activating Strategies:** How would you graph this? x + y = 8  **Lesson:** Graphing, by t-table method  **Resource/Materials:** Graphs, Markers, Power Point, graphic organizers, worksheets |
| **Differentiation:**  *Content/Process/Product:* Activating Strategy (Content), Cornell Notes  *Grouping Strategy:*  *Assessment:* informal | **Differentiation:**  *Content/Process/Product:* Cornell Notes  *Grouping Strategy:*  *Assessment:* informal | | **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy:*  *Assessment:* | **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy:* Random  *Assessment:* | **Differentiation:**  *Content/Process/Product:* graphic organizer, graphing boards  *Grouping Strategy:*  *Assessment:* |
| **Assessment :**  *Formative:* thumbs up/down  *Summative:* | **Assessment :**  *Formative:* thumbs up/down  *Summative:* | | **Assessment :**  *Formative:* thumbs up/down  *Summative:* | **Assessment :**  *Formative:* thumbs up/down  *Summative:* | **Assessment :**  *Formative:* graph boards, ticket-out-the-door  *Summative:* |
| **Homework:** WS Practice A and B (Day 9) Rates Ratios Proportions | **Homework**: WS Dimensional Analysis (Day 11) | | **Homework:** WS Levels of Accuracy and Define and Interpret Quantities | **Homework:** none | **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, ….