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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**: Review1. 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,$\sqrt[b]{a}$ , 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, ….