**Direct Instruction Lesson Plan**

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**Subject(s):** Math 1

**Topic or Unit of Study (Title):**  1.5 Adding & Subtracting and Multiplying and Dividing Real Numbers

**Grade Level:** 9th and 10th

***Materials:*** pencil, paper, calculator, overhead projector, transparent, overhead markers, worksheets

**Summary (*and Rationale*):** It is important for students to understand how to add, subtract, multiply, and divide real numbers. To be successful in Math, students must be able to understand how to apply these rules and concepts.

**I. Focus and Review (Establish Prior Knowledge):** [10 min]

Name the property that each statement illustrates.

|  |  |
| --- | --- |
| 1. $75+6=6+75$
2. $\frac{7}{9}×1= \frac{7}{9}$
3. $(9 +\left(-1+y\right)=\left(9+ -1\right)+ y$
 | 1. $6\left(a+10\right)= 6a+60$
2. $10x+0=10x$
 |

**II. Statement of Instructional Objective(s) *and Assessments*:**

|  |  |
| --- | --- |
| **Objectives** | **Assessments** |
| *When given an equation involving addition, subtraction, multiplication, and division students will be able find sums, differences, products, and quotients of real numbers with 80% accuracy.*  | Students will use the concepts learned in this lesson to complete the worksheet for homework with 80% accuracy.  |

State the objective: [1 minute]

Assessment: [no additional time is required]

**III. Teacher Input (Present tasks, information and guidance):**  [45 minutes]

The teacher will write the note on the overhead and include examples for the students and teachers to work out together.

1.5 Adding & Subtracting Real Numbers Notes (scanned in)

1.6 Multiplying & Dividing Real Numbers Notes (scanned in)

**IV. Guided Practice (Elicit performance):** [20 minutes]

Included in Teacher Input

***V.* Closure (Plan for maintenance):** [5 minutes]

Have the students answer these two word problems in their Math Journals.

1. A reef explorer dives 20 feet to a photograph brain coral and them rises 7 feet to travel over a ridge before diving 31 feet to survey the base of the reef. Then the diver rises 18 feet to see an underwater cavern. What is the location of the cavern in relation to sea level?
* Answer: -26 feet
1. The elevation of a hot air balloon changes by -3750 ft in 5 minutes after opening the parachute. What is the change in the hot air balloon’s elevation each minute?
* Answer: -750 feet each

***VI.* Independent Practice:** [homework]

There will be two different worksheets passes out for this lesson. The worksheets will be different levels so they will be able to focus on individual needs of the students.

**STANDARDS:**

* CCSS.Math.Content.HSA.SSE.A.1.a
Interpret parts of an expression, such as terms, factors, and coefficients.
* CCSS.Math.Content.HSA.SSE.A.1.b
Interpret complicated expressions by viewing one or more of their parts as a single entity.

**Plans for Individual Differences:** In this lesson I am combining two sections and based on the readiness of the students I will pass things that they have already learned. I will have two different worksheets that will focus of the individual need of the students.

**References (APA style):**

Charles, R. I., Hall, B., Kennedy, D., Bellman, A. E., Bragg, S. C., Handlin, W. G., . . . Wiggins, G. (2011). *Algebra I.* Upper Saddle River: Pearson Education, Inc. .