College Algebra Fundamentals

Section P-1 (Part 1): Real Numbers

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives**:

* Students will be able to classify subsets of real numbers.
* Students will be able to order real numbers on a number line.
* Students will be able to use inequalities to represent and interpret intervals.
* Students will be able to evaluate the absolute value of a number.

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| **Main Idea** | **Notes** |
| **Vocabulary:** **Vocabulary:** | Real Numbers: Subsets of Real Numbers:  Natural Numbers: Whole Numbers: Integers:Two Kinds of Real Numbers: Rational Numbers:  Irrational Numbers:The Real Number Line:  Origin: Negative Real Numbers:  Positive Real Numbers:The Four Inequality Symbols and What they Mean: |
| **Bounded Intervals on the Real Number Line:** | **Interval type Notation Inequality Graph****Interval type Notation Inequality Graph** |
| **Unbounded Intervals on the Real Number Line:** |
| **Example 1: Rewriting Inequalities** | As a graph:As a solution set:  |
|  **Vocabulary:** | Absolute Value: |
| **Example 2:****Simplifying Absolute Value Expressions** | Simplify each of the following:1. |9| + |-9|
2. |13| - |-2|
 |
| **Vocabulary:****Example 3: Identifying Terms** | Properties of Absolute Value:Distance Between two Points on the Line:Variable:Algebraic Expression:Terms:How many terms does x²- 5x +8 have? What are they? Classify them by name.  |
|  **Vocabulary:** | Coefficient:Evaluating an Algebraic Expression: Substitution Principle: |
| **Homework:**  |  |