**Algebra I (Regular and Honors as well as IA and IB) Overview**

**(Algebra IA and IB follow the same course description spaced out over two consecutive courses)**

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|  | | **Description of Average**  **Weekly Outside Requirements** | |
| **Main Topics**  **(What main ideas/concepts will be covered?):**  Simplifying expressions  Solving equations and inequalities  Number systems  Absolute Values  Variables  Exponent Laws  Functions  Graphing linear, quadratic, and inequality equations.  Polynomials  Transformations  Statistical Analysis  Key Features of Graphs | **Rationale**  **(Why should a student take this course?**  Algebra I is a requirement for high school graduation.  Algebra I reinforce concepts presented in earlier courses and permits students to explore new and more challenging content which prepares them for further studies and required mathematic courses.  (Honors Algebra I moves at a very quick pace and covers additional sections.) | **Reading**  **(Text, document, etc):**  Students will sometimes be asked to read sections in the text as we go over the chapter.  Some of the homework and test questions will have real world questions which require reading and comprehension. Students will apply mathematical skills and concepts learned to work problems and real-world examples. | **Written:**  Homework will be assigned daily from the textbook or workbook. It is a very important part of completing this course successfully.  Assignments, quizzes and tests will require students to show a written response in order to explain how they solved a given problem |
| **Grade Composition**  **(How are grades determined?):**  Tests  Quizzes  Homework  Class work  \*Passing the End of Course (EOC) exam given in May is a graduation requirement | **Skill Development**  **(What skills are developed in this course and how?)**  Students will learn how rational thinking in everyday life can be expressed as a mathematical expression that can be solved.  Students will deepen their conceptual understanding of key ideas and solution strategies which will extend their knowledge for problem solving application and skills. | **Sample Textbook Excerpt:**  **“One strategy you can use is to write an equation. Choose a variable to represent one of the unspecified numbers in the problem. This is called defining a variable. Then use the variable to write expressions for the other unspecified numbers in the problem”** | |
| **Required Skills**  **(What skills are necessary to be successful in this course?)**  Basic Arithmetic  Graphing  Reading/ Comprehension |