

PRE-ALGEBRA

Course length: one year

Credit: one

Grade Level: Freshman

Instructor: Mrs. Linda Guthmiller

Textbook: Pre-Algebra (Glencoe McGraw-Hill, 2010)

Course Description

Pre-Algebra serves as an introduction to Algebra and Geometry. Students will become familiar with the following: the properties of mathematics; the language of algebra; solving one step and two step equations; adding, subtracting, multiplying and dividing rational numbers and integers; solving inequalities; graphing equations and inequalities; proportion; percent; statistics and graphs; probability; applying algebra to geometry; measurement; introduction to trigonometry; and the study of polynomials.

Course Goal

Through training and developing the gifts the Lord has given us, the students display their God-given talents in Pre-Algebra by applying it to various real-world and mathematical situations in service to Him.

Objectives

The students will

- Use procedures to transform algebraic expressions
- Use a variety of algebraic concepts and methods to solve equations and inequalities
- Interpret and develop mathematical models
- Describe and use properties and behaviors of relations, functions, and inverses
- Use deductive and inductive reasoning to recognize and apply properties of geometric figures
- Learn formulas, strategies, and techniques that are essential to mathematics.
- Develop skills necessary for critical thinking and evaluation of mathematical problems.
- Learn to work efficiently in cooperative groups.
- Analyze charts and graphs.

Required Text/Supplies

- Students are required to bring:
 - Notebook
 - Pencil and eraser
 - Folder for papers
 - Protractor
 - Compass
 - Calculator – to be used as a tool, not a crutch!
- Supplied by the school:
 - Textbook: *Pre-Algebra*

Instructional Methods

- Lecture
- Group work
- Research - Labs

Methods of evaluation

- Discussion & Group participation
- Daily homework -- Daily assignments will be graded according to the grading scale found in the student handbook. All assignments are expected to be completed in the time allowed.
- Late work policy is as follows:
 - Day 1: 10% deduction of points
 - Day 2: In addition to consequences listed above, student will be in after school study hall until assignment is completed.
- Quizzes -- Any material covered in class is subject to a quiz.
- Tests -- Tests will be given at the end of each chapter.
- Final Exam -- At the end of each semester students will have an exam over the chapters covered.

Evaluation

All daily assignments will be considered equally. Your average grade will be based on total points for all assignments. Tests will not be weighted more. They will count for more points, but not for two or three grades. Late assignments will be docked points (as stated above). Attitude, effort, and class participation will also be measured in your overall grade.