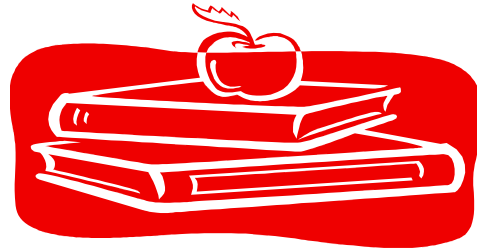


Mackay Junior/Senior High School



COURSE: Pre-Algebra- 7

Date: 8/22/2011

Teacher with contact information: **LaRue Lambert**

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COURSE DESCRIPTION

This course covers basic skills and Pre-algebra concepts in preparation for Algebra I. The Glencoe McGraw-Hill Pre-Algebra book will be used in class. In this course, the material is presented in a variety of ways including real-world applications and connections to other subjects. The content design of this course will hold the interest of students and answer the question “When am I ever going to use this?” The PLATO Web math courseware will also be used as needed to improve student skills on an individual basis.

The course will begin with a quick assessment and review of basic prerequisite skills. Unit One will cover topics in rational numbers and equations. Order of Operations, Operations with Integers, Rational Numbers and basic equations will be included. Unit Two will cover topics in Proportions, Percents and Similarity. Unit Three introduces Linear and Nonlinear Functions. Unit Four introduces two- and three-dimensional figures and finding distance, angles, surface area and volume. Unit Five covers data sets and an introduction to statistics and probability.

COMMON CORE / STATE CONTENT STANDARDS/VOCABULARY OBJECTIVES

- Translate verbal phrases into numerical expressions
- Evaluate Expressions using Order of Operations
- Identify and use properties of addition and multiplication
- Use words, tables, equations, and graphs to represent relations and functions
- Compare, order, add, subtract, multiply, and divide integers.
- Graph points and algebraic relationships on a coordinate plane
- Define, identify, and draw transformations
- Write fractions as terminating or repeating decimals.
- Identify, add, subtract, multiply and divide rational numbers

- Evaluate algebraic expressions with fractions
- Use the Distributive Property
- Solve equations by Using Properties of Equality
- Write equations to solve problems
- Use the Distributive Property to solve equations and inequalities
- Select and use appropriate operations to solve problems and justify solutions
- Write ratios as fractions in simplest form
- Find and compare unit rates
- Use and solve proportions
- Express percents as fractions and decimals and fractions as percents
- Use the percent proportion and percent equations to solve problems
- Construct and interpret circle graphs
- Solve and Graph linear equations with two variables
- Write and graph linear equations using the slope and y-intercept
- Solve systems of equations by graphing and substitution
- Write and evaluate expressions with exponents
- Write and compare numbers in scientific notation
- Use quadratic functions to solve problems
- Identify irrational numbers and classify real numbers,
- Classify triangles
- Solve Problems using the Pythagorean Theorem and the Distance Formula
- Identify the relationship between parallel and intersecting lines
- Identify properties of congruent triangles
- Find the Area of polygons, irregular figures and circles
- Identify three-dimensional figures
- Find volume and surface as of three-dimensional figures
- Examine properties of similar solids
- Find and use measures of central tendency and measures of variation
- Display and interpret data
- Find probabilities of simple events and independent and dependent event

INSTRUCTIONAL MATERIALS

Textbook: Glencoe McGraw-Hill Pre-Algebra

Glencoe.com – online resources for Pre-Algebra

Platoweb.com – online resource

UNITS WITH INSTRUCTIONAL DATES

The following lesson schedule is subject to revision.

Week	Lesson	Description
1	1.1 -1.3	Pre-Assessment Words and Expressions, Variables and Expressions, Properties
2	1.4 – 1.6	Ordered Pairs and Relations, Words, Equations, Graphs, Scatter Plots
3	Chapter 1	Review and Test
4	2.1-2.3	Integers and Absolute Value, Adding and Subtracting Integers
5	2.4 – 2.6	Multiplying and Dividing Integers, Graphing on the Coordinate Plane
6	2.7 Chapter 2 Review and Test	Translations and Reflections on the Coordinate Plane
7	3.1-3.4	Fractions & Decimals, Rational Numbers, Multiplying and Dividing Rational Numbers
8	3..5 – 3.6 Ch 3 Review and Test	Adding & Subtracting Like Fractions, Adding and Subtracting Unlike Fractions
9	4.1 – 4.2	Distributive Property, Simplifying Algebraic Expressions
End of 1st Quarter		
10	4.3– 4.5	Solving Equations by Adding and Subtracting, Solving Equations By Multiplying & Dividing, Solving Systems of Equations,
11	4.6	Writing Equations

	Ch 4 Review and Test		
12	5.1 – 5.3	Perimeter & Area, Solving Equations With Variables on Each Side, Inequalities	
13	5.4 – 5.5	Solving Inequalities Solving Multi-step Equations and Inequalities	
14	Chapter 5 Review and Test 6.1	Ratios	
15	6.2– 6.4	Unit Rates, Converting Rates and Measurements, proportional and Non-proportional Relationships,	
16	6.5– 6.8	Solving Proportions, Scale drawings and Models, Similar Figures, Dilations	
17	6.9 Chapter 6 Review and Test	Indirect Measurement	
18	Semester Tests		
End of First Semester			
Week	Lesson	Description	
19	7.1 – 7.3	Fractions and Percents, Fractions, Decimals and Using the Percent Proportion	
20	7.4 – 7.6	Find percent of Number Mentally, Using Percent of Change	
21	7.7 – 7.8 Chapter 7 Review and Test	Simple and Compound Interest, Circle Graphs	

22	8.1 – 8.3	Functions, Sequences and Equations, Representing Linear Functions	
23	8.4 – 8.6	Rate of Change, Constant Rate of Change and Direct variation, Slope	
24	8.7 – 8.9	Slope-Intercept form, Writing Linear Equations, Prediction Equations	
25	8.10 Ch 8 Review and Test	Systems of Equations	
26	9.1 – 9.3	Powers and Exponents, Prime Factorization, Multiplying and Dividing Monomials	
27	9.4 – 9.6	Negative Exponents, Scientific Notation, Powers of Monomials	
28	9.7- 9.9	Linear and Nonlinear Functions, quadratic Functions, cubic and Exponential Functions	
End of 3 rd Quarter			
29	Ch 9 Review and Test		
30	10.1 – 10.3	Squares and Square Roots, The Real Number System, Triangles	
31	10.4 – 10.6	The Pythagorean Theorem, The distance Formula, special Right Triangles	
32	Chapter 10 Review and Test 11.1-11.2	Angle & Line Relationships, Congruent Triangles	
33	11.3 – 11.5	Rotations, Quadrilaterals, Polygons	
34	11.6 – 11.8	Areas of Parallelograms, Triangles, and Trapezoids, Circles and Circumference, Area of circles	

35	11.9 Chapter 11 Review and Test	Area of Composite Figures	
36	12.1 – 12.3	Three-Dimensional Figures, Volume of Prisms and Cylinders	
37	13.1 – 13.4	Measures of Central Tendency, Stem and Leaf Plots, Measures of Variation, Box and Whisker	
38	Review and Semester Test		
End of 2 nd Semester			

ASSESSMENTS / TESTS

See Instructional Units/Dates

GRADING PROCEDURES

Daily Homework (6 – 8 per Chapter)	10 each
Daily 5 min Checks	5 each
Homework Quiz (3-4 per Chapter)	approx 10 each
Chapter Test	100
Notes, Class Participation, Projects	25
Semester Tests	200 each

Homework will be due daily. Full points will not be given if the assignment is late.

Quizzes and Tests must be taken during the class period. If absent, the student should arrange a make-up time before or after school.

Students should take daily notes and participate in classroom discussions. The notes and classroom participation will be graded at the end of each chapter.

Extra practice and tutorials are provided on the website Glencoe.com. The use of this website is optional and available to help students better understand the materials presented during class.

Extra Credit will be given for practice quizzes (2 pts) and practice tests (5 pts) completed on **Glencoe.com**. Points will only be given for quizzes that have been completed with 100% accuracy and tests that have been completed with at least 80% accuracy. Students may redo practice quizzes until they get all items correct. Extra credit for practice quizzes and tests will only be given for the current chapter. Results must be emailed to me at larulamb@mackayschools.org to receive credit.

Grades will be calculated by dividing the total points earned by a student by the total points possible.

