6/7/8 Math

CEDARS Course Code: 40000
Certificated Teacher: _____
Grading: P / U
Prerequisites: none
Text Provided: (check)
- ☐ Holt-McDougal Course 1
- ☐ Holt-McDougal Course 2
- ☐ Holt McDougal Course 3

Course Description:
Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures; congruence and similarity; angle relationships; the Pythagorean theorem; the rectangular coordinate system; sets and logic; ratio and proportion; estimation; formulas; and solving and graphing simple equations and inequalities. An average score of 70% on assignments & assessments is required for successful progress.

Materials Needed:
Graph paper or lined paper composition notebook, calculator.

Online resources:
khanacademy.org – selected math topics

Common Core Standards:
Ratios and Proportional Relationships
Analyze proportional relationships and use them to solve real-world and mathematical problems.
The Number System
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
Know that there are numbers that are not rational, and approximate them by rational numbers.
Expressions and Equations
Use properties of operations to generate equivalent expressions.
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Work with radicals and integer exponents.
Understand the connections between proportional relationships, lines, and linear equations.
Analyze and solve linear equations and pairs of simultaneous linear equations.
Functions
Define, evaluate, and compare functions.
Use functions to model relationships between quantities.
Geometry
Draw, construct and describe geometrical figures and describe the relationships between them.
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume of cylinders, cones and spheres.
Understand congruence and similarity using physical models, transparencies, or geometry software.
Understand and apply the Pythagorean Theorem.
Statistics and Probability
Use random sampling to draw inferences about a population.
Draw informal comparative inferences about two populations.
Investigate chance processes and develop, use, and evaluate probability models.
Investigate patterns of association in bivariate data.

Mathematical Practices
Make sense of problems and persevere in solving them.
Reason abstractly and quantitatively.
Construct viable arguments and critique the reasoning of others.
Model with mathematics.
Use appropriate tools strategically.
Attend to precision.
Look for and make use of structure.
Look for and express regularity in repeated reasoning.

Course Objectives:
To earn credit for this course, the student will demonstrate mastery of the following through assignments and assessments:

Course 1:	Course 2:	Course 3:
Whole number patterns	Algebraic Reasoning	Principles of Algebra
Introduction to Algebra	Integers and Rational	Rational Numbers
Decimals	Numbers	Graphs and Functions
Number Theory and Fractions	Applying Rational Numbers	Exponents and Roots
Fraction Operations	Proportional Relationships	Ratios, Proportions and
Collecting and Displaying Data	Graphs and Functions	Similarity
Proportional Relationships	Percents	Percents
Geometric Relationships	Collecting, Displaying &	Foundations of Geometry
Measurement and Geometry	Analyzing Data	Perimeter, Area & Volume
Measurement: Area & Volume	Geometric Figures	Data and Statistics
Integers	Measurement: 2-Dimensional	Probability
Probability	Figures	Multi-Step Equations
Functions, Equations and	Measurement: 3-Dimensional	Graphing Lines
Inequalities	Figures	Sequences and Functions
	Probability	Polynomials
	Multi-Step Equations and	
	Inequalities	

COURSE GRADE REQUIREMENTS
Scores:
Pass = 70% or better   No Pass = < 70%
1. Progress and course assignment completion will be evaluated at least monthly by the teacher.
2. Complete all assignments given in class at a minimum average 70% grade level
3. Complete and score 70% minimum average on any assessment given in class or conference
4. Maintain weekly timesheets showing a minimum average of 5 hours per week (adjusted for holidays)

EXTRA CREDIT / ALTERNATE ASSIGNMENTS
1. Additional math lab activities
2. Outside math assignments may substitute for class assignments, by the teacher's discretion

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STUDENT / PARENT SIGNATURE DATE

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CERTIFICATED TEACHER SIGNATURE   DATE