

NUMBER: **601/602**

TITLE: **MATH 7**

GRADE(S): 7

MEETS: DAILY

LENGTH: YEAR

CREDIT: 5 per semester

COURSE OUTCOMES:

1. Number and Operations. The student will:
 - Use numbers and exponents
 - Use order of operations
 - Compare numbers
 - Use decimal operations
 - Use estimation
 - Use scientific notation
 - Use prime factorization to find greatest common factor

2. Algebra – The student will:
 - Evaluate expressions
 - Use properties: identify, inverse, distribution
 - Write expressions and equations
 - Solve equations and inequalities
 - Find slope
 - Solve proportions

3. Geometry – The student will:
 - Find perimeter and area
 - Convert measures
 - Classify angles and polygons
 - Use the Pythagorean Theorem
 - Find circumference and area of circles
 - Find surface area and volume of prisms

4. Data Analysis and Probability
 - Find mean, medium and mode
 - Find outcomes
 - Find probability
 - Make and interpret data displays

5. Problem Solving
 - Make a model
 - Make a diagram
 - Use guess and check
 - Work backwards
 - Look for a pattern
 - Use a Venn diagram

COURSE SUMMARY: All incoming 7th graders take the first semester of Math 7. At the end of first semester, students are recommended for acceleration into Math 8 based on ITBS and CoGAT scores and teacher recommendation. Accelerated students will be on pace to take Honors Algebra 1 as an 8th grader.

NUMBER: **611/612**

TITLE: **PRE-ALGEBRA**

GRADE(S): 8

MEETS: DAILY

LENGTH: YEAR

CREDIT: 5 per semester

COURSE OUTCOMES:

1. Number Properties and Operations. The student will:
 - Develop a number sense
 - Use estimation
 - Use number operations
 - Use ratios and proportional reasoning

2. Measurement – The student will:
 - Use the physical attributes of measurement
 - Use systems

3. Geometry – The student will:
 - Find dimension and shape
 - Use transformation of shapes and preservation of properties
 - Find relationship between geometric figures
 - Use mathematical reasoning

4. Data Analysis and Probability – The student will:
 - Find data representation
 - Find the characteristics of data sets
 - Use experiments and samples
 - Find probabilities

5. Algebra – The student will:
 - Find patterns, relations, and functions
 - Use variables, expressions, and operations
 - Solve equations and inequalities