

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 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
- 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
 - Write expressions and equations
 - Find rate of change