



## Lois & Jerry Tarkanian Middle School

### Mathematics Accelerated 7

Mrs. Gelman

#### I. Course Scope:

This one-year course is designed to prepare students for the increased rigor of the Common Core State Standards (CCSS) Algebra I in middle school. This compacted course includes the grade six curriculum, the grade seven curriculum as well as a portion of the currently adopted CCSS grade eight curriculum. This course focuses on four critical areas: 1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; 2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; 3) writing, interpreting, and using expressions and equations; and 4) developing understanding of statistical thinking; 5) developing understanding of and applying proportional relationships; and 6) developing understanding of operations with rational numbers and working with expressions and linear equations.. Instructional practices incorporate integration of diversity awareness including appreciation of all cultures and their important contributions to society. The use of manipulatives, mathematical tools, and technology, including calculators and computer software, is an integral part of this course. This course fulfills the mathematics requirement for sixth-grade students.

#### II. Course Goals:

1. To develop the Standards for Mathematical Practice. [CCSS]
2. Apply and extend previous understandings of multiplication and division to divide fractions by fractions. [CCSS: 6.NS]
3. Compute fluently with multi-digit numbers and find common factors and multiples. [CCSS: 6.NS]
4. Apply and extend previous understandings of numbers to the system of rational numbers. [CCSS: 6.NS]
5. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide with rational numbers. [CCSS: 7.NS]
6. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. [CCSS: 6.NS]
7. Develop understanding of statistical variability. [CCSS: 6.SP]
8. Summarize and describe distributions. [CCSS: 6.SP]
9. Understand ratio concepts and use ratio reasoning to solve problems. [CCSS: 6.RP]
10. Analyze proportional relationships and use them to solve real-world and mathematical problems. [CCSS: 7.RP]
11. Apply and extend previous understandings of arithmetic to algebraic expressions. [CCSS:

6.EE]

12. Reason about and solve one-variable equations and inequalities. [CCSS: 6.EE]
13. Represent and analyze quantitative relationships between dependent and independent variables. [CCSS: 6.EE]
14. To use properties of operations to generate equivalent expressions. [CCSS: 7.EE]
15. Solve real-world and mathematical problems involving area, surface area, and volume. [CCSS: 6.G]
16. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. [CCSS: 7.EE]
17. Know that there are numbers that are not rational, and approximate them by rational numbers. [CCSS: 8.NS]
18. Work with radicals and integer exponents [CCSS: 8.EE]
19. Understand the connections between proportional relationships, lines, and linear equations. [CCSS: 8.EE]
20. Analyze and solve linear equations and pairs of simultaneous linear equations. [CCSS: 8.EE]
21. Draw, construct, and describe geometrical figures and describe the relationships between them. [CCSS: 7.G]
22. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. [CCSS: 7.G]
23. Understand and apply the Pythagorean Theorem. [CCSS: 8.G]
24. Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. [CCSS: 8.G]
25. Use random sampling to draw inferences about a population. [CCSS: 7.SP]
26. Draw informal comparative inferences about populations. [CCSS; 7.SP]
27. Investigate chance processes and develop, use, and evaluate probability models. [CCSS: 7.SP]

### III. Student Progress

## Grade Weighting

**Assessments: 70%**  
**Tests & Quizzes**

**Assignments: 30%**  
**Classwork & Homework**

### Semester One Weighting

Quarter One	40%
Quarter Two	40%
Exam	20%

### Semester Two Weighting

Quarter Three	40%
Quarter Four	40%
Exam	20%

## IV. Materials

The list of suggested school supplies for each student is provided in the student planner. In addition to these supplies, this course requests the following additional material:

- 1 ½ binder
- Sharpened pencils with erasers; mechanical pencils are allowed
- Correcting Pen – Red or Green
- Highlighters (4 different colors)
- Ear buds

## V. Policies

### A. Late Work

- Late work will receive a maximum score of a “B” and will not be accepted after each unit test. Any assignment not submitted will remain “missing” which equates to a score of 0% in the grade book.
- Every three missing assignments will result in the loss of one level of citizenship. This includes homework (given Monday – Thursday), ALEKS topics, and classwork.
  - 0-2 missing assignments = O (Outstanding)
  - 3-5 missing assignments = S (Satisfactory)
  - 6-8 missing assignments = N (Needs Improvement)
  - 9 or more missing assignments = U (Unsatisfactory)
- **It is your child’s responsibility to retrieve any missing notes and assignments from Google Classroom. This includes work resulting from absences.**