**COURSE DESCRIPTION**

**Course Title:** Advanced Math 7

**Course Number:** 00205

**Course Prerequisites:** Completion of Mathematics Grade 6 with a final average of at least 85%. Students  
 will also take two placement tests. Placement tests results along with the  
 marking period 1, 2, and 3 grades for the course will be used to determine  
 placement into Advanced Math 7.

**Course Description:** In the course, Advanced Mathematics 7, students’ learning will be focused on the major topics: The Number System, Expressions & Equations, Functions, Exponents, Ratio & Proportional Relationships, Probability, Geometry and Data Analysis. The pace and rigor of this course will establish the path to reach advanced mathematics in high school. Students will take the Grade 7 PSSA Math Exam. District marking period assessments are required. At the end of the first marking period, students must have an 80% or higher to continue in Advanced Mathematics 7.

**Suggested Grade Level**: Grade 7

**Length of Course:** Two Semesters

**Units of Credit:** 1

**PDE Certification and Staffing Policies and Guidelines (CSPG) Required Teacher Certifications:**

CSPG #50 Mathematics (7-12), CSPG #53 Middle Level Mathematics (6-9),   
CSPG #70 Grades 4 – 8 (All subjects 4-6, Mathematics 7-8)

To find the CSPG information, go to [CSPG](https://www.education.pa.gov/Educators/Certification/Staffing%20Guidelines/Pages/default.aspx)

**Certification verified by the WCSD Human Resources Department:** Yes No

**WCSD STUDENT DATA SYSTEM INFORMATION**

**Course Level:** Academic

**Mark Types:** Check all that apply.

F – Final Average MP – Marking Period EXM – Final Exam

**GPA Type**:  GPAEL-GPA Elementary  GPAML-GPA for Middle Level  NHS-National Honor Society

UGPA-Non-Weighted Grade Point Average  GPA-Weighted Grade Point Average

**State Course Code**: 02051

To find the State Course Code, go to [State Course Code](https://nces.ed.gov/forum/sced.asp), download the Excel file for *SCED*, click on SCED 6.0 tab, and choose the correct code that corresponds with the course.

**TEXTBOOKS AND SUPPLEMENTAL MATERIALS**

**Board Approved Textbooks, Software, and Materials:**

**Title:**  *Modeling Real Life Common Core – Grade 7 Advanced*

**Publisher:** Cengage Learning – Big Ideas Math

**ISBN #:**  978-1-64245-229-7

**Copyright Date:** 2019

**WCSD Board Approval Date:** 6/29/2020

**Supplemental Materials:** *enVisionmath 2.0 Grade 7 SAVVAS Learning Company LLC. 2017*,   
 *enVisionmath 2.0 Grade 8 SAVVAS Learning Company LLC. 2017*  
 Kuta Software, Get More Math, SAS pdesas.org, Brainfuse, IXL,  
 Calculator: TI-30XIIS, Online Calculator: DESMOS

**Curriculum Document**

**WCSD Board Approval:**

**Date Finalized:** 5/22/2023

**Date Approved:**  6/12/2023

**Date(s) Revised:** 6/10/2024 **Implementation Year:** 2023-2024

**SPECIAL EDUCATION, 504, and GIFTED REQUIREMENTS**

The teacher shall make appropriate modifications to instruction and assessment based on a student’s Individual Education Plan (IEP), Chapter 15 Section 504 Plan (504), and/or Gifted Individual Education Plan (GIEP).

**SCOPE AND SEQUENCE OF CONTENT, AND CONCEPTS**

**Marking Period 1: The Number System and Expressions, Equations and Inequalities, and   
 Graphs of Linear Equations**

* Integers and Rational Numbers
* Algebraic and Equivalent Expressions
* Operations with Expressions
  + Expansion and Factorization
  + Sum and Difference
  + Application
* Equations
  + Simple Equations
  + Multi-Step Equations
  + Equations with Variables on Both Sides
* Inequalities
  + One-Step Inequalities and Graphing
  + Multi-Step Inequalities and Graphing
* Graphs of Linear Equations
* Slope of a Line
* Graphs of Proportional Relationships
* **Marking Period 1 Review and Assessment**

**Marking Period 2: Forms of Linear Equations, Systems of Linear Equations, Ratios and   
 Proportional Relationships, and Relations and Functions**

* Linear Equations
  + Slope-Intercept Form
  + Equations in Point-Slope Form
* System of Linear Equations
  + Graphs
  + Substitution
  + Elimination
  + Special Systems
* Ratios, Rates, and Unit Rates
* Proportional Relationships
* Graphs of Proportional Relationships
* Percent Proportion
* Percent Equation
* Relations and Functions
* Representations of Functions
* **Marking Period 2 Review and Assessment**

**Marking Period 3: Linear Function, Statistics, Probability, and Geometry**

* Linear Functions
* Comparison of Linear and Nonlinear Functions
* Analysis and Sketches of Graphs
* Populations and Random Samples
* Inferences:
  + From Data
  + Comparative
* Probability:
  + Likelihood
  + Theoretical and Experimental
  + Models
  + Compound Events
* Geometric Figures and Their Properties
* Angle Properties and Their Measures
* Parallel Lines and Transversals
* Circles
* Surface Area
* **Marking Period 3 Review and Assessment**

**Marking Period 4: Geometry: Volume, Grade 7 Math PSSA Preparation and Assessment, Exponents   
 and Scientific Notation, Real Numbers and the Pythagorean Theorem, Geometry:   
 Surface Area and Volume, Geometry: Transformations and Mathematics Placement   
 Exam for Algebra 1 Honors Grade 8**

* Surface Area
* Volume
* **Grade 7 PSSA Math Preparation and Assessment**
* Exponents
  + Exponent Properties
  + Product of Powers Property
  + Quotient of Powers Property
  + Zero and Negative Exponents
* Estimation of Quantities
* Scientific Notation
* Operations in Scientific Notation
* Square Roots
* The Pythagorean Theorem
* Cube Roots
* Rational and Irrational Numbers
* The Converse of the Pythagorean Theorem
* Volume:
  + Cylinders
  + Cones
  + Spheres
* Similar Solids: Surface Area and Volume
* Translations
* Reflections
* Rotations
* **Mathematics Placement Exam for Algebra 1 Honors Grade 8**

**Standards/Eligible Content and Skills**

| **Performance Indicator** | **PA Core Standard and/or Eligible Content** | **Marking Period Taught** |
| --- | --- | --- |
| Add, subtract, multiply, and divide integers. | M07.A-N.1.1.1 | MP1 |
| Add, subtract, multiply, and divide rational numbers, including  real-world contexts. | M07.A-N.1.1.1  M07.A-N.1.1.3 | MP1 |
| Represent addition and subtraction of rational numbers on a horizontal or vertical number line. | M07.A-N.1.1.2 | MP1 |
| Solve real-world and mathematical problems involving the four operations with rational numbers; determine the reasonableness of the answer(s). | M07.A-N.1.1  M07.B-E.2.3.1 | MP1 |
| Use the order of operations to generate equivalent expressions. | M07.B-E.1.1.1 | MP1 |
| Apply the properties of operations to adding, subtracting, factoring, and expansion to linear expressions with rational coefficients. | M07.B-E.1.1.1 | MP1 |
| Solve equations using addition and subtraction with rational numbers. | M07.B-E.2.1  M07.B-E.2.1.1 | MP1 |
| Solve equations using multiplication and division with rational numbers. | M07.B-E.2.1  M07.B-E.2.1.1 | MP1 |
| Use one-step simple equations to solve real-world and mathematical problems with rational numbers; determine the reasonableness of the answer(s). | M07.B-E.2.2  M07.B-E.2.2.1  M07.B-E.2.3.1 | MP1 |
| Identify the solution of an equation. | M07.B-E.2.3.1 | MP1 |
| Solve a two-step equation with rational numbers. | M07.B-E.2.1 | MP1 |
| Solve a multi-step equation with rational numbers. | M07.B-E.2.1 | MP1 |
| Solve multi-step real-world and mathematical problems. | M07.B-E.2.2  M07.B-E.2.2.1  M07.B-E.2.3.1 | MP1 |
| Use the Distributive Property to solve an equation with rational numbers. | M07.B-E.2.1  M08.B-E.3.1.2 | MP1 |
| Solve an equation with variables on both sides. | M07.B-E.2.1  M08.B-E.3.1.2 | MP1 |
| Use the Distributive Property to solve equations with variables on both sides. | M07.B-E.2.1  M08.B-E.3.1.2 | MP1 |
| Solve an equation with no solution or infinitely many solutions. | M07.B-E.2.3.1  M08.B-E.3.1.1 | MP1 |
| Write and solve real-world and mathematical problems involving equations; determine the reasonableness of the answer(s). | M07.B-E.2.2  M07.B-E.2.1.1  M07.B-E.2.3.1 | MP1 |
| Review: Solve one-step inequalities. | M07.B-E.2.2.1 | MP1 |
| Solve two-step inequalities. | M07.B-E.2.2.1  CC.2.2.HS.D.10 | MP1 |
| Write and solve real-world and mathematical problems involving multi-step inequalities; determine the reasonableness of the answer(s). | M07.B-E.2.2  M07.B-E.2.2.2  M07.B-E.2.3.1 | MP1 |
| Graph inequalities on number lines. | M07.B-E.2.2.2  CC.2.2.HS.D.10 | MP1 |
| Graph linear equations using tables. | M08.B-E.3.1  M08.B-E.3.1.1 | MP1 |
| Graph horizontal lines and vertical lines. | M08.B-E.3.1  M08.B-E.3.1.1 | MP1 |
| Find the slopes of lines. | M08.B-E.2.1  M08.B-E.2.1.1  M08.B-E.3.1  M08.B-E.3.1.1 | MP1 |
| Find the slopes of horizontal lines and vertical lines. | M08.B-E.2.1  M08.B-E.2.1.1  M08.B-E.3.1  M08.B-E.3.1.1 | MP1 |
| Identify parallel lines. | M08.B-E.2.1  M08.B-F.2.1.1  M08.B-E.3.1  M08.B-E.3.1.1 | MP1 |
| Graph proportional relationships. | M08.B-E.3.1  M08.B-E.2.1.1  CC.2.2.8.B.2 | MP1 |
| Write and use an equation that represents a proportional situation. | M08.B-E.3.1  M08.B-E.2.1.1  CC.2.2.8.B.2 | MP1 |
| **Marking Period 1 Review and Assessment** |  | **MP1** |
| * Review and demonstrate knowledge of The Number System and Expressions. |  | MP1 |
| * Review and demonstrate knowledge of Equations and Inequalities. |  | MP1 |
| * Review and demonstrate knowledge of Graphs of Linear Equations. |  | MP1 |
| Identify slopes and y-intercepts. | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Graph a linear equation in slope-intercept form. | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Graph a linear equation using intercepts. | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Write equations in slope-intercept form. | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Write an equation from a graph and/or table (two points). | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Write an equation using a slope and a point. | M08.B-E.2.1.3  M08.B-E.3.1 | MP2 |
| Solve and check a system of linear equations by graphing. | M08.B-E.3.1  M08.B-E.3.1.3  M08.B-E.3.1.4  M07.B-E.2.3.1 | MP2 |
| Solve and check a system of linear equations by substitution. | M08.B-E.3.1  M08.B-E.3.1.3  M08.B-E.3.1.4  M07.B-E.2.3.1 | MP2 |
| Solve and check a system of linear equations by elimination. | M08.B-E.3.1  M08.B-E.3.1.3  M08.B-E.3.1.4  M07.B-E.2.3.1 | MP2 |
| Solve and check systems of linear equations with no solutions and infinitely many solutions. | M08.B-E.3.1  M08.B-E.3.1.4  M07.B-E.2.3.1 | MP2 |
| Solve real-world and mathematical problems leading to two linear equations in two variables; determine the reasonableness of the answer(s). | M08.B-E.3.1  M08.B-E.3.1.5  M07.B-E.2.3.1 | MP2 |
| Analyze, recognize, and represent proportional relationships and use them to solve real-world and mathematical problems; determine the reasonableness of the answer(s). | M07.A-R.1.1  M07.B-E.2.3.1 | MP2 |
| Compute unit rates associated with ratios of fractions, including ratio lengths, areas, and other quantities measured in like or different units. | M07.A-R.1.1.1 | MP2 |
| Determine whether two quantities are proportionally related. | M07.A-R.1.1.2 | MP2 |
| Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. | M07.A-R.1.1.3 | MP2 |
| Represent proportional relationships by equations. | M07.A-R.1.1.4 | MP2 |
| Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r), where r is the unit rate. | M07.A-R.1.1.5 | MP2 |
| Use proportional relationships to solve multi-step ratio problems. | M07.A-R.1.1.6 | MP2 |
| Solve real world and mathematical multi-step ratio problems applying proportional relationships.  (Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease.) | M07.A-R.1.1.6 | MP2 |
| Represent and solve percent problems using the percent equation. | M07.A-R.1.1.6 | MP2 |
| Solve real world and mathematical problems using the percent proportion and percent equation. (Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease) | M07.A-R.1.1.5  M07.A-R.1.1.6 | MP2 |
| Solve real-world and mathematical proportion problems:  (Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease) | M07.A-R.1.1.2  M07.A-R.1.1.3  M07.A-R.1.1.4 | MP2 |
| Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. | M07.A-R.1.1.3 | MP2 |
| Solve real-world and mathematical problems involving rate and unit rate; examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease. | M07.A-R.1.1.1 | MP2 |
| List ordered pairs of relations. | M08.B-F.1.1.1 | MP2 |
| Determine whether relations are functions. | M08.B-F.1.1.1 | MP2 |
| Write functions rules. | M08.B-F.1.1.1 | MP2 |
| Evaluate functions. | M08.B-F.1.1.1 | MP2 |
| Graph functions. | M08.B-F.1.1.1 | MP2 |
| **Marking Period 2 Review and Assessment** |  | **MP2** |
| * Review and demonstrate knowledge of Forms of Linear Equations. |  | MP2 |
| * Review and demonstrate knowledge of Systems of Linear Equations. |  | MP2 |
| * Review and demonstrate knowledge of Ratios and Proportional Relationships. |  | MP2 |
| * Review and demonstrate knowledge of Relations and Functions. |  | MP2 |
| Write a linear function using a graph. | M08.B-F.2.1.1 | MP3 |
| Write a linear function using a table. | M08.B-F.2.1.1 | MP3 |
| Interpret a linear function. | M08.B-F.1.1.3 | MP3 |
| Identify functions from tables. | M08.B-F.1.1.1 | MP3 |
| Identify functions from equations. | M08.B-F.1.1.1 | MP3 |
| Identify functions from graphs. | M08.B-F.1.1.1 | MP3 |
| Analyze graphs. | M08.B-F.1.1.2 | MP3 |
| Sketch graphs. | M08.B-F.1.1.2 | MP3 |
| Determine whether a sample is a random sample given real-world and mathematical problems. | M07.D-S.1.1.1 | MP3 |
| Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. | M07.D-S.1.1.2 | MP3 |
| Compare two numerical data distributions using measure of center and variability. | M07.D-S.2.1.1 | MP3 |
| Predict or determine whether some outcomes are certain, more likely, less likely, or impossible. | M07.D-S.3.1.1 | MP3 |
| Use probability to predict outcomes; determine the probability of a chance event given relative frequency; predict the approximate relative frequency given the probability. | M07.D-S.3.2.1 | MP3 |
| Find the theoretical probability of an event. | M07.D-S.3.2.1  M07.D-S.3.2.2 | MP3 |
| Find the experimental probability of an event. | M07.D-S.3.2.1  M07.D-S.3.2.2 | MP3 |
| Find the probability of a simple event, including the probability of a simple event NOT occurring. | M07.D-S.3.2.2 | MP3 |
| Find probabilities of independent compound events using organized lists, tables, tree diagrams, and simulation. | M07.D-S.3.2.3 | MP3 |
| Use the Fundamental Counting Principal to determine the number of outcomes in real-world and mathematical problems. | M07.D-S.3.2 | MP3 |
| Solve real-world and mathematical problems involving scale drawings or geometric figures; determine the reasonableness of the answer(s). | M07.C-G.1.1.1  CC.2.3.7.A.2  M07.B-E.2.3.1 | MP3 |
| Solve real-world and mathematical problems finding length and area of geometric figures; determine the reasonableness of the answer(s). | M07.C-G.1.1.1  CC.2.3.7.A.2  M07.B-E.2.3.1 | MP3 |
| Identify or describe the properties of all types of triangles based on angle and side measures. | M07.C-G.1.1.2  CC.2.3.7.A.2 | MP3 |
| Use and apply the Triangle Inequality Theorem. | M07.C-G.1.1.3 | MP3 |
| Describe two-dimensional figures that result from slicing three-dimensional figures. | M07.C-G.1.1.4  CC.2.3.7.A.2 | MP3 |
| Identify and use properties of supplementary, complementary, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure; determine the reasonableness of the answer(s). | M07.C-G.2.1.1  CC.2.3.7.A.1  M07.B-E.2.3.1 | MP3 |
| Identify and use properties of angles formed when two parallel lines are cut by a transversal: alternate interior, alternate exterior, vertical, corresponding. | M07.C-G.2.1.2  CC.2.3.7.A.1 | MP3 |
| Find the area of a circle. | M07.C-G.2.2.1  CC.2.3.7.A.1 | MP3 |
| Find the circumference of a circle. | M07.C-G.2.2.1  CC.2.3.7.A.1 | MP3 |
| Solve problems involving area and circumference of circles. | M07.C-G.2.2.1  CC.2.3.7.A.1 | MP3 |
| Solve real-world and mathematical problems involving the area of two-dimensional figures composed of triangles, quadrilaterals, polygons, and circles; determine the reasonableness of the answer(s). | M07.C-G.2.2.2  CC.2.3.7.A.1  M07.B-E.2.3.1 | MP3 |
| Find the surface area of right prisms and cubes. | M07.C-G.2.2.2  CC.2.3.7.A.1 | MP3 |
| **Marking Period 3 Review and Assessment** |  | **MP3** |
| * Review and demonstrate knowledge of Linear Functions. |  | MP3 |
| * Review and demonstrate knowledge of Statistics. |  | MP3 |
| * Review and demonstrate knowledge of Probability. |  | MP3 |
| * Review and demonstrate knowledge of Geometry. |  | MP3 |
| Find the surface area of right prisms and cubes. | M07.C-G.2.2.2  CC.2.3.7.A.1 | MP4 |
| Find the volume of right prisms and cubes. | M07.C-G.2.2.2  CC.2.3.7.A.1 | MP4 |
| Solve real-world and mathematical problems involving surface area and volume of three-dimensional objects composed of right prisms and cubes; determine the reasonableness of the answer(s). | M07.C-G.2.2.2  CC.2.3.7.A.1  M07.B-E.2.3.1 | MP4 |
| **Grade 7 PSSA Math Preparation and Assessment** |  | **MP4** |
| * Review and demonstrate knowledge of The Number System. | M07.A-N.1.1 | MP4 |
| * Review and demonstrate knowledge of Ratios and Proportional Relationships. | M07.A-R.1.1 | MP4 |
| * Review and demonstrate knowledge of Expressions and Equations. | M07.B-E.1.1  M07.B-E.2.1  M07.B-E.2.2  M07.B-E.2.3 | MP4 |
| * Review and demonstrate knowledge of Geometry. | M07.C-G.1.1  M07.C-G.2.1  M07.C-G.2.2 | MP4 |
| * Review and demonstrate knowledge of Statistics and Probability. | M07.D-S.1.1  M07.D-S.2.1  M07.D-S.3.1  M07.D-S.3.2 | MP4 |
| Write expressions using exponents. | M08.B-E.1.1.1 | MP4 |
| Use the order of operations to evaluate numeric expressions containing exponents. | M08.B-E.1.1.1 | MP4 |
| Multiply powers with the same base. | M08.B-E.1.1.1 | MP4 |
| Find the power of a power. | M08.B-E.1.1.1 | MP4 |
| Find the power of a product. | M08.B-E.1.1.1 | MP4 |
| Divide powers with the same base. | M08.B-E.1.1.1 | MP4 |
| Simplify an exponential expression. | M08.B-E.1.1.1 | MP4 |
| Evaluate expressions with negative exponents. | M08.B-E.1.1.1 | MP4 |
| Approximate a large number. | M08.B-E.1.1.3 | MP4 |
| Approximate a small number. | M08.B-E.1.1.3 | MP4 |
| Approximate a quantity. | M08.B-E.1.1.3 | MP4 |
| Write numbers in scientific notation. | M08.B-E.1.1.3 | MP4 |
| Write numbers in standard form. | M08.B-E.1.1.3 | MP4 |
| Perform operations with numbers expressed in scientific notation: addition, subtraction, multiplication, division. | M08.B-E.1.1.4 | MP4 |
| Find the square roots of perfect squares. | M08.B-E.1.1.2 | MP4 |
| Evaluate expressions involving square roots. | M08.B-E.1.1.2 | MP4 |
| Solve equations using square roots. | M08.B-E.1.1.2 | MP4 |
| Find the side lengths of a right triangle using the Pythagorean Theorem. | M08.C-G.2.1.2  CC.2.3.8.A.3 | MP4 |
| Find the lengths of three-dimensional figures using the Pythagorean Theorem. | M08.C-G.2.1.2  CC.2.3.8.A.3 | MP4 |
| Apply the Pythagorean Theorem to find the distance between two points in a coordinate plane. | M08.C-G.2.1.3  CC.2.3.8.A.3 | MP4 |
| Find cube roots. | M08.B-E.1.1.2 | MP4 |
| Evaluate expressions involving cube roots. | M08.B-E.1.1.2 | MP4 |
| Solve equations using cube roots. | M08.B-E.1.1.2 | MP4 |
| Write fractions and mixed numbers as decimals. | M08.B-E.1.1.2 | MP4 |
| Write a repeating decimal as a fraction. | M08.B-E.1.1.2 | MP4 |
| Classify real numbers. | M08.A-N.1.1.1 | MP4 |
| Approximate irrational numbers. | M08.A-N.1.1.3 | MP4 |
| Compare irrational numbers. | M08.A-N.1.1.4 | MP4 |
| Locate/identify rational and irrational numbers at their appropriate locations on a number line. | M08.A-N.1.1.5 | MP4 |
| Use the Converse of the Pythagorean Theorem. | M08.C-G.2.1.1  CC.2.3.8.A.3 | MP4 |
| Identify right triangles using the Converse of the Pythagorean Theorem. | M08.C-G.2.1.1  CC.2.3.8.A.3 | MP4 |
| Find the volume, height, and radius of a cylinder. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Solve real-world and mathematical volume problems of cylinders. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Find the volume, radius, and height of a cone. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Solve real-world and mathematical volume problems of cones. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Find the volume and radius of a sphere. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Solve real-world and mathematical problems of spheres. | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Identify similar solids.  (No pyramids) | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Find missing measures in similar solids.  (No pyramids) | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Find the volume of similar solids.  (No pyramids) | M08.C-G.2.1.1  CC.2.3.8.A.1 | MP4 |
| Identify a translation. | M08.C-G.1.1.1  CC.2.3.8.A.2 | MP4 |
| Translate a figure in the coordinate plane. | M08.C-G.1.1.1  M08.C-G.1.1.3  CC.2.3.8.A.2 | MP4 |
| Identify reflections. | M08.C-G.1.1.1  CC.2.3.8.A.2 | MP4 |
| Reflect figures in the coordinate plane. | M08.C-G.1.1.1  M08.C-G.1.1.3  CC.2.3.8.A.2 | MP4 |
| Identify a rotation. | M08.C-G.1.1.1  CC.2.3.8.A.2 | MP4 |
| Rotate a figure in the coordinate plane. | M08.C-G.1.1.1  M08.C-G.1.1.3  CC.2.3.8.A.2 | MP4 |
| Use more than one transformation: translation, reflections, rotation. | M08.C-G.1.1.2  CC.2.3.8.A.2 | MP4 |
| **Mathematics Placement Exam for Algebra 1 Honors Grade 8** |  | **MP4** |

**ASSESSMENTS**

**PDE Academic Standards, Assessment Anchors, and Eligible Content:** The teacher must be knowledgeable of the PDE Academic Standards, Assessment Anchors, and Eligible Content and incorporate them regularly into planned instruction.

**Formative Assessments:** The teacher will utilize a variety of assessment methods to conduct in-process evaluations of student learning.

**Effective formative assessments for this course include:  
Suggested but not limited to:**

* Pre-assessments of prior knowledge (e.g., Entrance cards or KWL chart)
* Bellringers/Problems of the Day (PODs)
* Discussions
* Exit ticket
* Teacher observations/Questioning
* Graphic organizers (e.g., Venn Diagrams, word mapping, webbing, KWL chart, etc.)
* Outlining
* Cooperative learning
* Written work
* Quizzes
* Oral response
* Self-evaluation
* Homework
* Summarizing
* Note-taking

**Summative Assessments:** The teacher will utilize a variety of assessment methods to evaluate student learning at the end of an instructional task, lesson, and/or unit.

**Effective summative assessments for this course include:  
Suggested but not limited to:**

* Performance assessment
* Chapter/unit tests
* Quizzes
* Marking period assessments
* Projects
* Student presentations