

## WARREN COUNTY SCHOOL DISTRICT

### PLANNED INSTRUCTION

#### **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](#)

**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](#), download the Excel file for SCED, click on SCED 6.0 tab, and choose the correct code that corresponds with the course.

## WARREN COUNTY SCHOOL DISTRICT

### PLANNED INSTRUCTION

#### **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

## WARREN COUNTY SCHOOL DISTRICT

### PLANNED INSTRUCTION

- 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**

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

**Standards/Eligible Content and Skills**

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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
<b>Marking Period 1 Review and Assessment</b>		<b>MP1</b>
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of The Number System and Expressions.</li> </ul>		MP1
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Equations and Inequalities.</li> </ul>		MP1
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Graphs of Linear Equations.</li> </ul>		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

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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



**WARREN COUNTY SCHOOL DISTRICT**

**PLANNED INSTRUCTION**

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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
<b>Marking Period 2 Review and Assessment</b>		<b>MP2</b>
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Forms of Linear Equations.</li> </ul>		MP2
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Systems of Linear Equations.</li> </ul>		MP2
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Ratios and Proportional Relationships.</li> </ul>		MP2
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Relations and Functions.</li> </ul>		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

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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
<b>Marking Period 3 Review and Assessment</b>		<b>MP3</b>
• 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

**WARREN COUNTY SCHOOL DISTRICT**

PLANNED INSTRUCTION

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
<b>Grade 7 PSSA Math Preparation and Assessment</b>		<b>MP4</b>
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of The Number System.</li> </ul>	M07.A-N.1.1	MP4
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Ratios and Proportional Relationships.</li> </ul>	M07.A-R.1.1	MP4
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Expressions and Equations.</li> </ul>	M07.B-E.1.1 M07.B-E.2.1 M07.B-E.2.2 M07.B-E.2.3	MP4
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Geometry.</li> </ul>	M07.C-G.1.1 M07.C-G.2.1 M07.C-G.2.2	MP4
<ul style="list-style-type: none"> <li>Review and demonstrate knowledge of Statistics and Probability.</li> </ul>	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

**WARREN COUNTY SCHOOL DISTRICT**

**PLANNED INSTRUCTION**

<b>Performance Indicator</b>	<b>PA Core Standard and/or Eligible Content</b>	<b>Marking Period Taught</b>
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
<b>Mathematics Placement Exam for Algebra 1 Honors Grade 8</b>		<b>MP4</b>

## **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