

Our Lady of the Lake Roman Catholic School
Yearly Course Outline
Pre-Algebra
Seventh Grade
2023–2024

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Teacher’s Room Number: 204

Course Description

The Pre-Algebra course introduces students to algebraic concepts, both theory and application, through hands-on experiences, modeling, and online interaction. This course focuses on the study of algebraic manipulation and graphical interpretations through the use of real-world problems.

Instructional Materials

Carnegie Learning, Mathematics Course 3
Pearsons MyLab Math
Mathia
IXL

Methods of Assessment and Distribution

All test, quiz, and homework grades will be posted on PowerSchool (www.ollpowerschool.org). Please check for postings frequently. Each quarter, four test- and four quiz-weighted assessments will be administered.

1st & 2nd Quarters

(Exams taken)

50% Tests

20% Exams

20% Quizzes

10% Homework

3rd & 4th Quarters

(No Exams taken)

60% Tests

---% Exams

30% Quizzes

10% Homework

Grading Scale

A: 100-94

B: 93-86

C: 85-78

D: 77-70

U: 69 and below

Tentative Course Calendar

**** Dates and course content are subject to change at discretion of teacher or administration. ****

Week	Standards	Objectives (The learner will . . .)	Instructional Materials	Assessments
1st Quarter				
Week 1 <i>Aug. 14-18</i> 8/15 – Back-to-School Mass (7th) 8/18 Summer reading due	8.NS.1 8.NS.2 8.EE.2	PREASSESSMENT/REVIEW To write equivalent fractions and decimals; To find and estimate square roots and to classify numbers as rational or irrational	Text/Mathia/Handouts	Quiz 1-Rational Nos
Week 2 <i>Aug. 21-25</i>	8.EE.2 8.G.7	To find cubed roots and to solve cube root equations; To use the Pythagorean Theorem to find the length of the hypotenuse of a right triangle	Text/Mathia/Handouts	Test 1-Rational Numbers
Week 3 <i>Aug. 28-01</i>	8.EE.2 8.G.7	To find cubed roots and to solve cube root equations; To use the Pythagorean Theorem to find the length of the hypotenuse of a right triangle	Text/Mathia/Handouts	Quiz 2-Cubes & Pythagorean Puzzle
Week 4 <i>Sept. 04-08</i> 9/4 No School	8.EE.2 8.G.7	To use the Pythagorean Theorem to find the length of the hypotenuse and legs of a right triangle	Text/Mathia/Handouts	Quiz 3 – Finding a, b, and c using the Pythagorean theorem
Week 5 <i>Sept. 11-15</i> 9/13 – 7th Grade Retreat	8.EE.7 8.EE.8.b	To use the Pythagorean Theorem to find the length of the hypotenuse and legs of a right triangle; using the distance formula; coordinate plane review	Text/Mathia/Handouts	Test 2-Pythagorean Formula and Distance Formula
Week 6 <i>Sept. 18-22</i>	8.EE.7.a 8.EE.7.b 8.EE.7	Solving one step equations review	Text/Mathia/Handouts	Quiz 3 – one step equations review
Week 7 <i>Sept. 25-29</i> Spirit Week 9/29 Fun Run Kickoff	8.F.5 8.F.1 8.EE.5	To write and solve equations with variables on both sides; To identify whether a linear equation in one variable has one, infinitely many, or no solutions	Text/Mathia/Handouts	Test 3 – Two-step equations
Week 8 <i>Oct. 02-06</i>	8.EE.7 8.EE.8.b	To combine like terms and to simplify algebraic expressions; To write and solve multi step equations	Text/Mathia/Handouts	Test 4-CLT/Algebraic Expressions
Week 9 <i>Oct. 09-13</i> 10/13 ½ day (Fun Run)		EXAM REVIEW/EXAM	Text/Mathia/Handouts	EXAM
2nd Quarter				
Week 10 <i>Oct. 16-20</i>	8.EE.7 8.EE.8.b	To combine like terms and to simplify algebraic expressions; To write and solve multi step equations	Text/Mathia/Handouts	Test 1-Solving Multi-Step Equations
Week 11 <i>Oct. 23-27</i> 10/27 Fun Run Reward Day	8.EE.7 8.EE.8.b	To combine like terms and to simplify algebraic expressions; To write and solve multi step equations	Text/Mathia/Handouts	Quiz 1 - Multi-Step Equations – How Many Solutions?

Week 12 <i>Oct. 30-03</i>	8.EE.5 8.EE.6 8.F.1 8.F.3 8.F.4	To find the slope of a line from a graph or table; To utilize the slope formula to find the slope of a line To use tables and equations to graph linear functions	Text/Mathia/Handouts	Quiz 2-Slope
Week 13 <i>Nov. 06-10</i> 11/6 No School (Formation Day) 11/7 Virtual (Senior Day) 11/10 Virtual (OLL Festival)	8.EE.5 8.F.2 8.F.4	To write function rules from words, tables, and graphs; To compare properties of two functions represented in different ways	Text/Mathia/Handouts	Test 2-Slope and Slope Intercept Form
Week 14 <i>Nov. 13-17</i>	8.EE.5 8.EE.6 8.F.1 8.F.3 8.F.4	To find the slope of a line from a graph or table; To utilize the slope formula to find the slope of a line To use tables and equations to graph linear functions	Text/Mathia/Handouts	Test 3 – Stained Glass Window Project
Week 15 <i>Nov. 27-30</i>	8.EE.8	To solve systems of two linear equations in two variables by graphing the equations	Text/Mathia/Handouts	Quiz 3 – Solving Systems by Graphing
Thanksgiving Holidays <i>Nov. 21-25</i>				
Week 16 <i>Dec. 04-08</i> 12/8 – Immaculate Conception School Mass and Nativity (7th)	8.EE.8	To solve a system of linear equations by substitution;	Text/Mathia/Handouts	Quiz 4-Solving Systems of Equations by Graphing and Substitution
Week 17 <i>Dec. 11-15</i>	8.EE.8	To solve a system of linear equations by elimination; To use systems of linear equations to solve real world problems	Text/Mathia/Handouts	Test 4-Systems of Equations (Graphing, Substitution, and Elimination)
Week 18 <i>Dec. 18-20</i> 12/20 ½ day	EXAM REVIEW/EXAM	6-7 th – Middle School Exams	EXAM	
Christmas Holidays <i>Dec. 21-05</i>				
3rd Quarter				
Week 19 <i>Jan. 08-12</i>	8.EE.3	To write numbers in both standard form and scientific notation; multiply and divide exponents	Text/Mathia/Handouts	Quiz 1-Scientific Notation & Multiplying Exponents
Week 20 <i>Jan. 15-19</i> 1/15 No School	8.EE.4 8.EE.1 8.EE.3	To multiply and divide numbers in scientific notation	Text/Mathia/Handouts	Test 1- Multiplying and Dividing with Scientific Notation

Week 21 <i>Jan. 22-26</i>	8.G.5	To identify types of angles; To find angle measures using the relationship between angles; To identify parallel lines and the angles formed by parallel lines and transversals	Text/Mathia/Handouts	Quiz 2- Vocabulary and Angle Pairs
Week 22 <i>Jan. 29-02</i> Catholic Schools Week, 2/2 Pep Rally	8.G.5	To identify types of angles; To find angle measures using the relationship between angles; To identify parallel lines and the angles formed by parallel lines and transversals	Text/Mathia/Handouts	Test 2-Finding the Missing Angles
Week 23 <i>Feb. 05-09</i> 2/9 ½ day (Grandparents Day)	8.G.4 8.G.5 8.EE.6	To identify similar figures and to use proportions to find missing measurements in the similar figures; To determine measures of the angles of triangles and to use them to prove that triangles are similar	Text/Mathia/Handouts	Test 3- Congruence Statements and Congruent Triangles
Mardi Gras Holidays Feb. 12-16				
Week 24 <i>Feb. 19-23</i>	8.G.4 8.G.5 8.EE.6	To find the interior and exterior angles of a polygon	Text/Mathia/Handouts	Quiz 3 – Interior/ Exterior Angle Maze
Week 25 <i>Feb. 26-01</i>	8.G.1.a 8.G.1.b 8.G.1.c 8.G.3	To graph and describe translations in the coordinate plane To graph reflections in the coordinate plane and to identify lines of symmetry To graph rotations and to identify rotational symmetry	Text/Mathia/Handouts	Quiz 4 – Translations and Reflections
Week 26 <i>Mar. 04-08</i>	8.G.3 8.G.4	To graph dilations and to determine the scale factor of a dilation	Text/Mathia/Handouts	
Week 27 <i>March 11-15</i>	8.G.3 8.G.4	To describe a sequence of transformations that maps one figure onto another to determine whether two figures are similar by using a sequence of transformations	Text/Mathia/Handouts	Test 4- Transformation Book Project Due
4th Quarter				
Week 28 <i>March 18-22</i> 3/21 – Passion Play	8.G.9 8.G.7	To identify solids, parts of solids, and skew line segments; To find the volume of prisms and cylinders To find the volumes of pyramids and cones; To find the surface area and volume of a sphere	Text/Mathia/Handouts	Quiz 1-Volume of a Cylinder Test 1- Volume of Cylinder, Sphere, and Cone
Week 29 <i>March 25-29</i> 3/29 No School (Good Friday)	8.G.9 8.G.7	To identify solids, parts of solids, and skew line segments; To find the volume of prisms and cylinders To find the volumes of pyramids and cones; To find the surface area and volume of a sphere	Text/Mathia/Handouts	Quiz 2 – Volume of Cylinder, Cone, and Sphere Vocabulary Check

				Test 2-Design Your Own Ice Cream Shop
Easter Holidays <i>March 29-05</i>				
Week 30 <i>April 08-12</i>	8.G.9 8.G.7	To identify solids, parts of solids, and skew line segments; To find the volume of prisms and cylinders To find the volumes of pyramids and cones; To find the surface area and volume of a sphere	Text/Mathia/Handouts	Quiz 3 – SA of a sphere
Week 31 <i>April 15-19</i>		To identify Polynomials, use the FOIL method, factor binomials and trinomials	Text/Mathia/Handouts	Test #3 – Adding and Subtracting Polynomials
Week 32 <i>April 22-26</i>		To identify Polynomials, use the FOIL method, factor binomials and trinomials	Text/Mathia/Handouts	Quiz 4-FOIL Task Cards Test 4 – Adding and Subtracting Polynomials and FOIL
Week 33 <i>April 29-03</i> 5/3 Field Day		Review Stations	Text/Mathia/Handouts	
Week 34 <i>May 06-10</i> 5/6 – May Crowning 5/9 – 7th Closing Ceremony		Graduation		