

Our Lady of the Lake Roman Catholic School
Yearly Course Outline
Pre-Algebra
Seventh Grade
2024–2025

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Room Number: 204

Teacher's

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
30% Quizzes
10% Homework

Grading Scale

A: 100-90
B: 89-80
C: 79-70
D: 69-60
U: 59 and below

Tentative Course Calendar

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

Aug 8 – First day of school for 4th – 7th

Week	Standards	Objectives (The learner will . . .)	Instructional Materials	Assessments
1st Quarter				
Week 1 Aug. 12-16	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 Aug. 19-23	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 Aug. 26-30	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 Sept. 3-6 9/2 Labor Day 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 Sept. 9-13	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 Sept. 16-20	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 Sept. 23-27 Spirit Week 9/27 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 Sept. 30-Oct. 3 10/3 Living Rosary 10/4 – No School	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 Oct. 7-11 10/11 - ½ day (Fun Run)		6 th - 7 th – Middle School Exams	Text/Mathia/Handouts	EXAM
2nd Quarter				

Week 10 Oct. 14-18	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 Oct. 21-25 10/25 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 Oct. 28-31 11/2-OLL Festival	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 Nov. 4-8 11/6 - 11/7 Saints Alive	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 Nov. 11-15	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 Nov. 18-22	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 Nov. 25-29				
Week 16 Dec. 2-6	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 Dec. 9-13	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 Dec. 16-20 12/20 - ½ day		6 th - 7 th – Middle School Exams		
Christmas Holidays Dec. 21 – Jan. 5				
3rd Quarter				
Week 19 Jan. 6-10	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 Jan. 13-17	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 Jan. 21-24 1/20 - No School	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 Jan. 27-31 Catholic Schools Week 1/31 - 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 Feb. 3-7	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
Week 24 Feb. 10-14	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 Feb. 17-21 2/21 - Eve Parade	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 Feb. 24-28 2/28 – ½ Day Grandparents Day	8.G.3 8.G.4	To graph dilations and to determine the scale factor of a dilation	Text/Mathia/Handouts	
Mardi Gras Holiday March 3-7				
Week 27 March 10-14 3/14 – ½ Day	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 March 17-21	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

<p>Week 29 March 24-28</p>	<p>8.G.9 8.C.7</p>	<p>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</p>	<p>Text/Mathia/Handouts</p>	<p>Quiz 2 – Volume of Cylinder, Cone, and Sphere Vocabulary Check</p> <p>Test 2-Design Your Own Ice Cream Shop</p>
<p>Week 30 March 31 - Apr 4</p>	<p>8.G.9 8.C.7</p>	<p>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</p>	<p>Text/Mathia/Handouts</p>	<p>Quiz 3 – SA of a sphere</p>
<p>Week 31 April 7-11</p>		<p>To identify Polynomials, use the FOIL method, factor binomials and trinomials</p>	<p>Text/Mathia/Handouts</p>	<p>Test #3 – Adding and Subtracting Polynomials</p>
<p>Week 32 April 14-17 4/17 Passion Play 4/18 Good Friday</p>		<p>To identify Polynomials, use the FOIL method, factor binomials and trinomials</p>	<p>Text/Mathia/Handouts</p>	<p>Quiz 4-FOIL Task Cards</p> <p>Test 4 – Adding and Subtracting Polynomials and FOIL</p>
<p><i>Easter Holiday</i> <i>April 21-25</i></p>				
<p>Week 33 April 28-May 2 5/2 - Field Day ½ Day</p>		<p>Review Stations</p>	<p>Text/Mathia/Handouts</p>	
<p>Week 34 May 5-9 5/6 May Crowning 5/8 7th Grade Closing Ceremony</p>		<p>Graduation</p>		