

**Our Lady of the Lake Roman Catholic School**  
**Yearly Course Outline**  
**Math**  
**6<sup>th</sup> Advanced Math**  
**2023–2024**

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**Course Description**

The Middle School math program strives to reinforce basic mathematical concepts and problem-solving skills, as well as introduce the students to the basics of algebra through hands-on experiences, online interaction, and everyday applications of algebraic concepts.

**Instructional Materials**

Carnegie Learning, Mathematics Course 2

Mathia

IXL

**Methods of Assessment and Distribution**

All test, quiz, and homework grades will be posted on PowerSchool ([www.ollpowerschool.org](http://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
<b>1st Quarter</b>				
<b>Week 1</b> <i>Aug. 14-18</i> 8/18 Summer reading due	7.NS.1.a 7.NS.1.b 7.NS.1.c 7.NS.1.d	PREASSESSMENT REVIEW OPERATIONS WITH FRACTIONS	Fraction Packet	Quiz 1-Fractions
<b>Week 2</b> <i>Aug. 21-25</i>	7.NS.1.a 7.NS.1.b 7.NS.1.c 7.NS.1.d	write the quotients of integers as fractions and decimals (terminating and repeating)	Text, Mathia	Test 1-Fractions (Canvas)
<b>Week 3</b> <i>Aug. 28-01</i>	7.NS.2.a 7.NS.2.b	Compare and order integers; identify and add opposites Add, subtract, multiply and divide integers	Text, Mathia	Quiz 2-Integers (Dragon Activity)
<b>Week 4</b> <i>Sept. 04-08</i> 9/4 No School	7.NS.2.b 7.NS.2.d 7.NS.1 7.NS.1.b 7.NS.1.c 7.NS.1.d 7.NS.3	Identify, compare, and order rational numbers Add and subtract rational numbers	Text, Mathia	Test 2-Integer Operations (Canvas)
<b>Week 5</b> <i>Sept. 11-15</i>	7.NS.2 7.NS.2.a 7.NS.2.b 7.NS.2.c 7.NS.3	Use number lines and properties to illustrate and solve multiplication of rational numbers Use the rules of dividing rational numbers to divide and solve problems containing division of rational numbers  Model real-life situations with number sentences  Recognize and apply the order of operations	Text, Mathia	Quiz 3-Rational Numbers
<b>Week 6</b> <i>Sept. 18-22</i>	7.EE.4 7.EE.1	identify differences between expressions and equations use bar models to write expressions and equations and to solve for unknown quantities model contextual and mathematical situations using double number lines	Text, Mathia	Test 3-Rational Numbers
<b>Week 7</b> <i>Sept. 25-29</i> Spirit Week 9/29 Fun Run Kickoff	7.EE.4a	use inverse operations to solve equations using Properties of Equality eliminate fractional and decimal terms in equations using multiplication	Text, Mathia	Quiz 4-Expressions
<b>Week 8</b> <i>Oct. 02-06</i> 10/4 – 6th Grade Retreat	7.EE.1 7.EE.3	identify like terms combine like terms in linear expressions with rational coefficients	Text, Mathia	Test 4-Expressions and Equations
<b>Week 9</b>		Exam Review	Text, Mathia	

<b>Oct. 09-13</b> 10/13 ½ day (Fun Run)				
<b>2nd Quarter</b>				
<b>Week 10</b> <b>Oct. 16-20</b>	7.EE.1 7.EE.3	simplify expressions using number properties and combining like terms factor linear expressions using greatest common factor	Text, Mathia	Quiz 1-Combining Like Terms Activity
<b>Week 11</b> <b>Oct. 23-27</b> 10/27 Fun Run Reward Day	7.EE.4a	write one step equations from tables and graphs  write and solve one step equations to solve real world problems  use multiple representations to analyze problem situations	Text, Mathia	Test 2-One Step Equations
<b>Week 12</b> <b>Oct. 30-03</b>	7.EE.2 7.EE.4a 7.EE.4	write two step equations from tables and graphs  write and solve two step equations to solve real world problems  use multiple representations to analyze problem situations	Text, Mathia	Quiz 2-Two-Step Equations
<b>Week 13</b> <b>Nov. 06-10</b> 11/6 No School (Formation Day) 11/7 Virtual (Senior Day) 11/10 Virtual (OLL Festival)	7.EE.2 7.EE.4a 7.EE.4 7.EE.3	write two step equations from tables and graphs  write and solve two step equations to solve real world problems  use multiple representations to analyze problem situations  to solve equations using the distributive property	Text, Mathia	Test 2-Equations and the distributive property
<b>Week 14</b> <b>Nov. 13-17</b>	7.EE.4b	Solve and graph inequalities: adding, subtracting	Text, Mathia	Quiz 3-Inequalities
<b>Week 15</b> <b>Nov. 27-30</b>	7.EE.4b	Solve and graph inequalities: multiplying, dividing	Text, Mathia	Test 3-One step Inequalities
<b>Thanksgiving Holidays</b> <b>Nov. 21-25</b>				
<b>Week 16</b> <b>Dec. 04-08</b>	7.RP.1	recall the concepts of ratio and unit rate and how to represent these mathematical objects using tables and graphs use the unit rate as a measure of a qualitative characteristic determine ratios and write rates, including complex ratios and rates	Text, Mathia	Quiz 4-Unit Rate
<b>Week 17</b> <b>Dec. 11-15</b>	7.RP.1	write proportions scale up and scale down to determine unknown quantities	Text, Mathia	Test 4-Ratio/Rate/Proportion
<b>Week 18</b>		6-7 <sup>th</sup> – Middle School Exams		

<b>Dec. 18-20</b> 12/20 ½ day				
<b>Christmas Holidays</b> <b>Dec. 21-05</b>				
<b>3rd Quarter</b>				
<b>Week 19</b> <b>Jan. 08-12</b>	7.EE.3 7.RP.3	To convert between fractions, decimals, and percent  To use proportions to solve problems using percent	Text, Mathia	Quiz 1-FDP
<b>Week 20</b> <b>Jan. 15-19</b> 1/15 No School	7.RP.3	Solving percent problems using equations	Text, Mathia	Test 1-FDP, Part, Whole and Percent
<b>Week 21</b> <b>Jan. 22-26</b> 1/25 – Social Studies Fair	7.RP.3	use proportions to solve percent problems use equations to solve percent problems involving tip, tax, commission, sale price	Text, Mathia	Quiz 2-Percent Proportion
<b>Week 22</b> <b>Jan. 29-02</b> Catholic Schools Week, 2/2 Pep Rally	7.RP.3	use proportions to solve percent problems use equations to solve percent problems involving tip, tax, commission, sale price	Text, Mathia	Test 2-Daisy's Donuts
<b>Week 23</b> <b>Feb. 05-09</b> 2/9 ½ day (Grandparents Day)	7.RP.3	use proportions to solve percent problems use equations to solve percent problems involving tip, tax, commission, sale price	Text, Mathia	Quiz 3-Simple Interest
<b>Mardi Gras Holidays</b> <b>Feb. 12-16</b>				
<b>Week 24</b> <b>Feb. 19-23</b>	7.RP.3	use proportions to solve percent problems use equations to solve percent problems involving tip, tax, commission, sale price	Text, Mathia	Test 3-Calculating Interest, Tip, and Tax
<b>Week 25</b> <b>Feb. 26-01</b>	7.G.5	To write and solve equations to find unknown angle measures	Text, Mathia	Quiz 4-Vocabulary and Angle Pairs
<b>Week 26</b> <b>Mar. 04-08</b>	7.G.4	To find the area and circumference of a circle  explore the relationship between the distance around and the distance across various circles explore the area of a circle in terms of its circumference solve problems using the formulas for the circumference and area for circles use the area of a circle formula and the circumference formula to solve for unknown measurements in real-world and mathematical problem	Text, Mathia	Test 4-Circles, Area, and Circumference
<b>Week 27</b> <b>March 11-15</b>	7.G.3	To classify and draw three dimensional figures	Text, Mathia	Begin 3D project
<b>4th Quarter</b>				

<b>Week 28</b> <b>March 18-22</b>	7.G.6	To find the surface area of prisms and cylinders using nets	Text, Mathia	Test 1 – 3D Net Project
<b>Week 29</b> <b>March 25-29</b> 3/29 No School (Good Friday)	7.G.6	To find the surface area of prisms and cylinders using nets	Text, Mathia	Quiz 1- SA prisms and pyramids
<b>Easter Holidays</b> <b>March 29-05</b>				
<b>Week 30</b> <b>April 08-12</b>	7.G.4	To find the surface area of prisms and cylinders using nets	Text, Mathia	Quiz 2 – SA Cylinder Maze  Test 2 – SA prisms, pyramids, and cubes
<b>Week 31</b> <b>April 15-19</b>	7.SP.1 7.SP.2 7.SP.3 7.SP.4	To find and analyze the mean of a set of data using models and calculations; To find and analyze the median and mode of a set of data	Text, Mathia	Quiz 3-Mean, Median, Mode, Range
<b>Week 32</b> <b>April 22-26</b>	7.NC.1 7.NS.1.b 7.NS.1.c 7.NS.1.d 7.NS.2 7.NS.2.a 7.NS.2.b 7.NS.2.c 7.NS.3	To identify rational and irrational numbers; To show that numbers are rational and to plot rational numbers on a number line; To compare and order rational numbers; adding, subtracting, multiplying and dividing integers	Text, Mathia, Notes	Test #3 – Integer Board Game
<b>Week 33</b> <b>April 29-03</b> 5/3 Field Day	7.G.4	To find the volumes of prisms and cylinders	Text, Mathia	Test 3 – Volume of a Prism and Cylinder canvas
<b>Week 34</b> <b>May 06-10</b>	7.SP.6 7.SP.7.b 7.SP.8.a 7.SP.8.b 7.SP.7 7.SP.8 7.SP.8.c	design and use simulations to estimate the probability of compound events  make and use sample spaces and to use the fundamental counting principle  find the probability of dependent and independent events  contrast “and” and “or” compound events  simulate the probability of compound events	Text, Mathia	Quiz 3 Probability Stations  Quiz 4 Theoretical Probability – Canvas
<b>Week 35</b> <b>May 13-17</b>	7.SP.6 7.SP.7.b 7.SP.8.a 7.SP.8.b 7.SP.7 7.SP.8 7.SP.8.c	design and use simulations to estimate the probability of compound events  make and use sample spaces and to use the fundamental counting principle  find the probability of dependent and independent events  contrast “and” and “or” compound events	Text, Mathia	Test 4 Compound Probability - Canvas

		simulate the probability of compound events		
<b>Week 36</b> <b>May 20-24</b> 5/20 End-of-year Mass 5/24 ½ day		Review Stations	Review Packet	