

## SYLLABUS IN MATHEMATICS 7

### FIRST QUARTER – GRADE 7

PROGRAM STANDARD	The learner demonstrates understanding and appreciation of key concepts and principles of mathematics as applied – using appropriate technology – in problem solving, communicating, reasoning, making connections, representations, and decisions in real life.
GRADE LEVEL STANDARD	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement); patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); and geometry (sides and angles of polygons) as applied – using appropriate technology – in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
CONTENT STANDARD	The learner demonstrates understanding of key concepts of sets and the real number system.
PERFORMANCE STANDARD	The learner is able to formulate challenging situations involving sets and real numbers and solve these in a variety of strategies.

TIME FRAME	TOPICS	LEARNING COMPETENCIES	ASSESSMENT
WEEK1	<p>NUMBER AND NUMBER SENSE</p> <ul style="list-style-type: none"> <li>• Sets and Subsets</li> </ul> <p>Values on Focus:                      -Demonstrate contributions towards solidarity                      -Students will share common interest</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7NS-Ia-1:</b> describes well-defined sets, subsets, universal sets, and the null set and cardinality of sets.</li> <li>• <b>M7NS-Ia-2:</b> illustrates the union</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• The Boat is Sinking</li> <li>• Large Group Discussion</li> <li>• Board work</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 1: Sets</li> <li>• LAS 2:Subsets and</li> </ul>

	-Practice cooperation in group task/activity	and the intersection of sets and the difference of two sets.	Universal Set
WEEK2	<ul style="list-style-type: none"> <li>• Basic Set Operations</li> <li>• Venn Diagram</li> <li>• Subsets of Real Numbers</li> </ul> <p>Values on Focus:  - Is sensitive to individual, social and cultural differences: people should be treated equally and create a good relationship with other people  -Patience and accuracy in constructing Venn Diagram</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• defines and describes the universal set, the union, intersection, and difference of sets, and the complement of a set.</li> <li>• <b>M7NS-Ib-1:</b> uses Venn Diagrams to represent sets, subsets, and set operations.</li> <li>• <b>M7NS-Ib-2:</b> solves problem involving sets.</li> <li>• describes, represents, and compares the different subsets of real numbers.</li> <li>• finds the union, intersection, difference of, and complement of the set of real numbers and its subsets.</li> <li>• <b>M7NS-Ih-1:</b> arranges real numbers in increasing or decreasing order.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Follow-up Practice(exercise given in the textbook)</li> <li>• Pairs Compare</li> <li>• Checklist</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 3 Set Operations</li> <li>• LAS 4 The Real Number System</li> <li>• Performance Task #1</li> </ul>
WEEK3	<ul style="list-style-type: none"> <li>• Properties of Real Numbers</li> <li>• The Set of Whole Numbers</li> </ul>	<p>The learner...</p>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Follow-up</li> </ul>

	<ul style="list-style-type: none"> <li>The Set of Whole Numbers involving Problem Solving</li> </ul> <p>Values on Focus:</p> <ul style="list-style-type: none"> <li>Is sensitive to individual, social and cultural differences: valuing and respecting one's property</li> <li>Demonstrate contribution towards solidarity: shows cooperation in group work and shows perseverance</li> </ul>	<ul style="list-style-type: none"> <li>states and illustrates the different properties of the operations on real numbers.</li> <li>performs fundamental operations on whole numbers.</li> <li>performs fundamental operations on whole numbers involving problem solving.</li> </ul>	<p>Practice(exercise given in the textbook)</p> <ul style="list-style-type: none"> <li>Q-Spinner</li> <li>Brainstorming</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 5: Properties of Real Numbers</li> <li>LAS 6: The Set of Whole Numbers</li> </ul>
WEEK4	<ul style="list-style-type: none"> <li>The Set of Integers</li> </ul> <p>Values on Focus:</p> <ul style="list-style-type: none"> <li>Is sensitive to individual, social and cultural differences: appreciate the negative and positive things in life and appreciate differences</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7NS-Ij-1:</b> performs fundamental operations on whole numbers involving problem solving.</li> <li>describes the opposite of a number.</li> <li><b>M7NS-le-1:</b> represents the absolute value of a number on a number line as the distance of a number from zero.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Math Focus(Sharing)</li> <li>Follow-up Practice(exercise given in the textbook)</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 7: The Set of Integers</li> <li>Long Test</li> </ul>
WEEK5	First Mid-Quarter Examination		
WEEK6	<ul style="list-style-type: none"> <li>Adding Integers</li> <li>Subtracting Integers</li> </ul> <p>Values on Focus:</p> <ul style="list-style-type: none"> <li>Stress the importance of following rules and regulations</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7NS-ic-d-1:</b> performs fundamental operation on integers.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Board Work</li> <li>Clarification Pauses</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 8: Adding Integers</li> </ul>

	-Inculcate the virtue of being open to suggestions particularly to new approach in solving problem	<ul style="list-style-type: none"> <li>• <b>M7NS-Id-2:</b> illustrates the different properties of operations on the set of integers.</li> </ul>	<ul style="list-style-type: none"> <li>• LAS 9: Subtracting Integers</li> <li>• Quiz</li> </ul>
WEEK7	<ul style="list-style-type: none"> <li>• Multiplying Integers</li> <li>• Dividing Integers</li> </ul> <p>Values on Focus: - Demonstrates contribution towards solidarity: positive traits students should possess and contribute a skill that can help accomplish the task</p>	<ul style="list-style-type: none"> <li>• <b>M7NS-Ic-d-1:</b> performs fundamental operation on integers.</li> <li>• <b>M7NS-Id-2:</b> illustrates the different properties of operations on the set of integers.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Inside/Outside Circle</li> <li>• Number heads Together</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 10: Multiplying and Dividing Integers</li> <li>• Quiz</li> </ul>
WEEK8	<ul style="list-style-type: none"> <li>• The Sets of Fractions</li> <li>• The Sets of Decimals</li> </ul> <p>Values on Focus: - Demonstrates contribution towards solidarity: equal sharing to others and cooperation</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7NS-Ie-2:</b> arranges rational numbers on a number line.</li> <li>• <b>M7NS-If-1:</b> performs operations on rational numbers</li> <li>• <b>M7NS-Ie-1:</b> expresses rational numbers from fraction form to decimal form and vice versa.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Brainstorming (review and grouping)</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 11: The Set of Fractions</li> <li>• LAS 12: The Set of Decimals</li> <li>• Quiz</li> <li>• Performance Task #2</li> </ul>
WEEK9	<ul style="list-style-type: none"> <li>• The Sets of Irrational Numbers</li> </ul> <p>Values on Focus: - Demonstrates contribution towards solidarity: appreciating the contribution of others</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7NS-ig-1:</b> describes the principal square root of a number and tell whether it is rational or irrational.</li> <li>• <b>M7NS-Ig-1:</b> determines</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Large group Discussion</li> <li>• Think-Pair-Share</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 13: The Set of Irrational Numbers</li> </ul>

		<p>between what two integers the square root of a number is.</p> <ul style="list-style-type: none"><li>• <b>M7NS-Ig-3:</b> estimates the square root of a whole number to the nearest hundredth.</li></ul>	<ul style="list-style-type: none"><li>• Long Test</li></ul>
WEEK10	First Quarter Examination		

## SYLLABUS IN MATHEMATICS 7

### SECOND QUARTER – GRADE 7

PROGRAM STANDARD	The learner demonstrates understanding and appreciation of key concepts and principles of mathematics as applied – using appropriate technology – in problem solving, communicating, reasoning, making connections, representations, and decisions in real life.
GRADE LEVEL STANDARD:	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement); patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); and geometry (sides and angles of polygons) as applied – using appropriate technology – in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
CONTENT STANDARD:	The learner demonstrates understanding of the key concepts of measurement. The learner demonstrates understanding of key concepts of algebraic expressions, the properties of real numbers as applied in linear equations, and inequalities in one variable.
PERFORMANCE STANDARD:	The learner is able to formulate real-life problems involving measurements and solve these using a variety of strategies. The learner is able to model situations using oral, written, graphical, and algebraic methods in solving problems involving algebraic expressions, linear equations, and inequalities in one variable.

TIME FRAME	TOPICS	LEARNING COMPETENCIES	ASSESSMENT
WEEK1	<p style="text-align: center;">MEASUREMENT</p> <ul style="list-style-type: none"> <li>• Historical Development of</li> </ul>	The learner...	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Clarification Pauses</li> </ul>

	<p>Measurement</p> <ul style="list-style-type: none"> <li>Measuring Instruments</li> </ul> <p>Values on Focus:          -Coordination and participation in group activity.          -Practice care in handling instruments</p>	<ul style="list-style-type: none"> <li><b>M7ME-IIa-2:</b> describes the development of measurement from the primitive to the present international system of units.</li> <li><b>M7ME-IIa-2:</b> describes what it means to measure.</li> <li><b>M7ME-IIa-3:</b> approximates the measures of quantities particularly length, weight/mass, volume, time, angle and temperature and rate.</li> </ul>	<ul style="list-style-type: none"> <li>Follow-up Practice(exercise given in the textbook)</li> <li>Think-Pair-Share</li> </ul> <p>Summative;</p> <ul style="list-style-type: none"> <li>LAS1: Historical Development of Measurement</li> </ul>
WEEK2	<ul style="list-style-type: none"> <li>Converting Measurements</li> </ul> <p>Values on Focus:          -Appreciate the appropriateness solution for problems.          -Practicing independence in performing a seatwork.          -Inculcate the importance of being honest to oneself</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7ME-IIb-1:</b> converts measurements from one unit to another in both metric and English systems.</li> <li><b>M7ME-IIb-2;</b> solves problems involving conversion of units of measurement.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Follow-up Practice(exercise given in the textbook)</li> <li>Group Evaluation</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 2: Converting Measurement(Length and Mass)</li> <li>LAS 3: Converting Measurement(Capacity and Time)</li> <li>Quiz</li> <li>Performance task #1</li> </ul>
WEEK3	<ul style="list-style-type: none"> <li>Perimeter, Area and Volume</li> </ul>	<p>The learner...</p>	<p>Formative:</p>

	<p>Values on Focus: -Appreciate existence of a circle in the world.</p>	<ul style="list-style-type: none"> <li>derives inductively the formulas for perimeter, area, and volume.</li> <li>solves real-life problems involving perimeter, area, and volume.</li> </ul>	<ul style="list-style-type: none"> <li>Numbered heads Together</li> <li>Large Group Discussion</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 4: Perimeter and Area</li> <li>LAS 5: Volume</li> </ul>
WEEK4	<p><b>ALGEBRAIC EXPRESSIONS</b></p> <ul style="list-style-type: none"> <li>Terminology</li> <li>Simplifying Numerical Expressions</li> </ul> <p>Values on Focus: -One has to set and accomplish goals, be determining in achieving it. -To appreciate the beauty of simplicity.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7AL-IIc-3:</b> differentiates between constant terms and variables in a given algebraic expressions.</li> <li>identifies the base, coefficient, terms, and exponents, in a given polynomial.</li> <li>simplifies numerical expressions.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Peer Review</li> <li>Active Review Sessions</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 6: Terminology</li> <li>LAS 7: Simplifying Rational Expressions</li> <li>Long Test</li> </ul>
WEEK5	Second Mid-Quarter Examination		
WEEK6	<ul style="list-style-type: none"> <li>Evaluating Algebraic Expressions</li> <li>Verbal Phrases and Algebraic Expressions</li> </ul> <p>Values on Focus: -One has to set and accomplish goals, be determining in achieving it. -Be creative in connecting learned concept to</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7AL-IIc-4:</b> evaluates an algebraic expression for given values of the variables.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Follow-up Practice(exercise given in the textbook)</li> <li>Q-Spinner</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 8: Evaluating Algebraic</li> </ul>



	real-life.	<ul style="list-style-type: none"> <li>• <b>M7AL-IIc-1:</b> translates verbal phrases to algebraic expressions, and vice versa.</li> </ul>	<p>Expressions</p> <ul style="list-style-type: none"> <li>• LAS 9: Verbal Phrases and Algebraic Expressions</li> </ul>
WEEK7	<ul style="list-style-type: none"> <li>• The Laws of Exponents</li> <li>• Adding Polynomials</li> </ul> <p>Values on Focus: -Student will appreciate the value of investing money and following laws.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-II d-e-1:</b> derives inductively the laws of exponents.</li> <li>• illustrates the laws of exponents.</li> <li>• defines and give examples of polynomials, monomials, binomials, trinomials, and multinomial.</li> <li>• <b>M7AL-II d-2:</b> adds polynomials.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Checklist</li> <li>• Brainstorming</li> <li>• Mix-Pair-Discuss</li> </ul> <p>Summative;</p> <ul style="list-style-type: none"> <li>• LAS 10: The Laws of Exponents</li> <li>• LAS 11: Adding and Subtracting Polynomials</li> </ul>
WEEK8	<ul style="list-style-type: none"> <li>• Subtracting Polynomials</li> <li>• Multiplying Polynomials</li> </ul> <p>Values on Focus: -Appreciate the value of following rules/laws. -Observe neatness in every accomplished task.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-II d-2:</b> subtracts polynomials.</li> <li>• <b>M7AL-II e-2:</b> multiplies polynomials.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Flashcard Games</li> <li>• Idea Spinner</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 12: Subtracting Polynomials</li> <li>• LAS 13: Multiplying</li> </ul>

			Polynomials <ul style="list-style-type: none"> <li>• Quiz</li> </ul>
WEEK9	<ul style="list-style-type: none"> <li>• Dividing Polynomials</li> </ul> <p>Values on Focus; -Enhance accuracy and develop consistency in dealing with division of polynomials.</p>	The learner... <ul style="list-style-type: none"> <li>• <b>M7AL-Ile-2:</b> divides polynomials.</li> </ul>	Formative: <ul style="list-style-type: none"> <li>• Follow-up Practice(exercise given in the textbook)</li> <li>• Partners</li> </ul> Summative: <ul style="list-style-type: none"> <li>• LAS 14: Dividing Polynomials</li> <li>• Performance task #2</li> <li>• Long Test</li> </ul>
WEEK10	Second Quarter Examination		

## SYLLABUS IN MATHEMATICS 7

### THIRD QUARTER – GRADE 7

PROGRAM STANDARD	The learner demonstrates understanding and appreciation of key concepts and principles of mathematics as applied – using appropriate technology – in problem solving, communicating, reasoning, making connections, representations, and decisions in real life.
GRADE LEVEL STANDARD	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement); patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); and geometry (sides and angles of polygons) as applied – using appropriate technology – in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
CONTENT STANDARD	The learner demonstrates understanding of key concepts of algebraic expressions, the properties of real numbers as applied in linear equations, and inequalities in one variable.
PERFORMANCE STANDARD	The learner is able to model situations using oral, written, graphical, and algebraic methods in solving problems involving algebraic expressions, linear equations, and inequalities in one variable.

TIME FRAME	TOPICS	LEARNING COMPETENCIES	ASSESSMENT
WEEK1	<p style="text-align: center;">LINEAR EQUATIONS AND INEQUALITIES IN ONE VARIABLE</p> <ul style="list-style-type: none"> <li>• Linear Equations in One Variable</li> <li>• Addition Property of Equality</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-IIh-1:</b> differentiates between mathematical expressions and</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Think-Pair-Share</li> <li>• Clarification Pauses</li> <li>• Review Math Focus</li> </ul> <p>Summative:</p>

	<p>Values on Focus:</p> <ul style="list-style-type: none"> <li>-The value of working together to achieve a common goal.</li> <li>-Valuing that existence of problems may mean existence of solutions as well.</li> <li>-Know what to add and what to subtract from one's attitude to gain more friends.</li> </ul>	<p>mathematical equations.</p> <ul style="list-style-type: none"> <li>• finds solution of an equation involving one variable <ul style="list-style-type: none"> <li>○ from a given placement set</li> <li>○ intuitively by guess and check</li> <li>○ by mental mathematics</li> <li>○ by graphing</li> <li>○ by using algebra tiles</li> <li>○ by using flow diagram</li> </ul> </li> <li>• <b>M7AL-III-1:</b> finds the solution of an equation involving one variable by applying the addition property of equality.</li> </ul>	<ul style="list-style-type: none"> <li>• LAS 1: Linear Equations in One Variable</li> <li>• LAS 2: Addition Property of Equality</li> </ul>
WEEK2	<ul style="list-style-type: none"> <li>• Multiplication Property of Equality</li> </ul> <p>Values on Focus:</p> <ul style="list-style-type: none"> <li>-Promote equality in the society.</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-III-1:</b> finds the solution of an equation involving one variable by applying the multiplication property of equality.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Follow-up Practice(exercise given in the textbook)</li> <li>• Numbered Heads Together</li> <li>• Maintain your skills(exercise given in the textbook)</li> </ul> <p>Summative;</p> <ul style="list-style-type: none"> <li>• LAS 3: Multiplication Property of Equality</li> <li>• Quiz</li> </ul>
WEEK3	<ul style="list-style-type: none"> <li>• Solving Equations Involving More Than One Operation</li> </ul> <p>Values on Focus:</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-III-1:</b> solves linear equations in one variable</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Group Evaluations</li> <li>• Board work</li> <li>• Brainstorming</li> </ul>

	-Practice cooperation	involving more than one operation.	Summative: <ul style="list-style-type: none"> <li>LAS 4: Solving Equations Involving More Than One Operation</li> </ul>
WEEK4	<ul style="list-style-type: none"> <li>Solving Equations Involving Fractions</li> <li>Solving Equations Involving Decimals</li> </ul> <p>Values on Focus: -Know how to practice honesty. -Develop competence in solving</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>solves linear equations in one variable involving fractions.</li> <li>solves linear equations in one variable involving decimals.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Follow-up Practice(exercise given in the textbook)</li> <li>Active review Sessions</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 5: Solve Equations Involving Fractions</li> <li>LAS 6: Solve Equations Involving Decimals</li> <li>Long Test</li> </ul>
WEEK5	Third Mid-Quarter Examination		
WEEK6	<ul style="list-style-type: none"> <li>Linear Equation Involving Absolute Value</li> <li>Mathematical Equations and Verbal Sentences</li> </ul> <p>Values on Focus: -Work harmoniously with others. -Stress the importance of keeping communications between interacting parties open.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7AL-1ii-1:</b> solves linear equations in one variable involving absolute value.</li> <li><b>M7AL-1lh-2:</b> translates verbal English sentences to mathematical sentences, and vice versa.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Q-Spinner</li> <li>Clarification Pauses</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>LAS 7: Linear Equations Involving absolute Value</li> <li>LAS 8: Mathematical Equations and Verbal Sentences</li> </ul>
WEEK7	<ul style="list-style-type: none"> <li>Problems Involving Linear Equations in One Variable</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li><b>M7AL-1lj-2:</b> solves real-life</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>Clarification Pauses</li> </ul>

	<p>Values on Focus: -Inculcate the idea that for every problem there is always a solution.</p>	<p>problems that use linear equations in one variable</p>	<ul style="list-style-type: none"> <li>• Cooperative Group in Class</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 9: Problems Involving Linear Equations in One Variable</li> <li>• Quiz</li> </ul>
WEEK8	<ul style="list-style-type: none"> <li>• Solving Linear Inequalities</li> </ul> <p>Values on Focus: -Emphasize that there is equality in the eyes of one Creator-God.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-IIh-3:</b> differentiates between equations and inequalities.</li> <li>• <b>M7AL-ii-1:</b> finds solutions of an inequality involving one variable.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Large Group Discussion</li> <li>• Numbered Heads Together</li> <li>• Written Activity</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 10: Solving Linear Inequalities</li> </ul>
WEEK9	<ul style="list-style-type: none"> <li>• Solving Problems Involving Linear Inequalities in One Variable</li> </ul> <p>Values on Focus: -Give the significance of saving for the future-thriftiness.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7AL-IIj-2:</b> solves real-life problems that use inequalities in one variable.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Large Group Discussion</li> <li>• Think-pair-Share</li> <li>• Partners</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 11: Solving Problems Involving Linear Inequalities in One Variable</li> <li>• Long Test</li> <li>• Performance task #1</li> </ul>
WEEK10	Third Quarter Examination		

## SYLLABUS IN MATHEMATICS 7

### FOURTH QUARTER – GRADE 7

PROGRAM STANDARD	The learner demonstrates understanding and appreciation of key concepts and principles of mathematics as applied – using appropriate technology – in problem solving, communicating, reasoning, making connections, representations, and decisions in real life.
GRADE LEVEL STANDARD	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement); patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); and geometry (sides and angles of polygons) as applied – using appropriate technology – in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
CONTENT STANDARD	The learner demonstrates understanding of key concepts of geometry of shapes and sizes, and geometric relationships.
PERFORMANCE STANDARD	The learner is able to create models of plane figures and formulate and solve accurately authentic problems involving side and angles of a polygon.

TIME FRAME	TOPICS	LEARNING COMPETENCIES	ASSESSMENT
WEEK1	<p><b>BASIC CONCEPTS IN GEOMETRY</b></p> <ul style="list-style-type: none"> <li>• Undefined Terms</li> <li>• Angles</li> </ul> <p>Values on Focus: -Students realize the importance of individuality. Like objects have their</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIa-1:</b> represents a point, line, and plane using concrete and pictorial models.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Peer Review</li> <li>• Q Spinner</li> <li>• Follow-up Practice(exercise given in the textbook)</li> </ul> <p>Summative:</p>

	<p>individual shapes, persons have their individual characteristics that make them unique.</p> <p>-Students realize the importance of parts, may it be opposite of the other, in a structure.</p> <p>-Students may be named in different ways but those names pertain to the same person. It's not the name that identifies the person but the attitude and behavior.</p>	<ul style="list-style-type: none"> <li>• <b>M7GE-IIIa-2:</b> defines, identifies, and names the subsets of a line.</li> <li>• <b>M7GE-IIIa-3:</b> defines, illustrates, names, and identifies the different kinds of angles.</li> </ul>	<ul style="list-style-type: none"> <li>• LAS 1: Undefined Terms</li> </ul>
WEEK2	<ul style="list-style-type: none"> <li>• Adjacent and Complementary Angles</li> <li>• Supplementary Angles</li> </ul> <p>Values on Focus:</p> <p>-Students realize that pairs don't always have to be the same. There are pairs that are opposite but complement each other. Same through with friendship.</p> <p>-Students realize that significance of group work. That there are tasks that cannot be done by one person and so other may help to finish the task.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIb-1:</b> derives relationships between adjacent angles and complementary angles by using measurements and inductive reasoning.</li> <li>• <b>M7GE-IIIb-1:</b> derives relationships between supplementary angles by using measurements and inductive reasoning.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Triad</li> <li>• Clarification Pauses</li> <li>• Numbered Heads Together</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 2: Adjacent and Complementary Angles</li> <li>• LAS 3 Supplementary Angles</li> </ul>
WEEK3	<ul style="list-style-type: none"> <li>• Linear Pairs</li> <li>• Vertical Angles</li> <li>• Perpendicular Lines</li> </ul> <p>Values on Focus:</p> <p>-Students realize that pairs don't</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIb-1:</b> derives relationships between linear pairs by using measurements and</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Large Group Discussion</li> <li>• Sharing by pair</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 4: Linear Pairs</li> </ul>



	<p>always have to be the same. There are pairs that are opposite but complement each other. Same through with friendship.</p> <p>-Students realize that significance of group work. That there are tasks that cannot be done by one person and so other may help to finish the task.</p>	<p>inductive reasoning.</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIb-1:</b> derives relationships between vertical angles by using measurements and inductive reasoning.</li> <li>• <b>M7GE-IIIb-1:</b> derives relationships between perpendicular lines by using measurements and inductive reasoning.</li> </ul>	<ul style="list-style-type: none"> <li>• LAS 5: Vertical Angles</li> <li>• LAS 6: Perpendicular Lines</li> <li>• Quiz</li> </ul>
WEEK4	<ul style="list-style-type: none"> <li>• Angles Formed by Parallel Lines Cut by a Transversal</li> </ul> <p>Values on Focus:</p> <p>-Emphasize the importance of self-discipline.</p> <p>-Emphasize the value of having initiative.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIc-1:</b> derives relationships among angles formed by parallel lines cut by a transversal by using measurements and inductive reasoning.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Think-Pair-Share</li> <li>• Inside/Outside Circle</li> <li>• Follow-up Practice(exercise given in the textbook)</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 7: Angles Formed by Parallel Lines Cut by a Transversal</li> <li>• Long Test</li> <li>• Performance Task #1</li> </ul>
WEEK5	Fourth Mid-Quarter Examination		
WEEK6	<p>SOME PLANE FIGURES</p> <ul style="list-style-type: none"> <li>• Polygons</li> <li>• Triangles</li> </ul>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• <b>M7GE-IIIe-2:</b> defines and illustrates convex polygons.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Find Someone Who</li> <li>• Numbered Heads Together</li> </ul>

	<p>Values on Focus: -Students understand the meaning of group differences. Like shapes, they may all be pertaining to shapes but some are curves, others are polygons and some are mix of both.</p>	<ul style="list-style-type: none"> <li>• <b>M7GE-III-f-1:</b> derives the relationship of sides, angles, and diagonals of any convex polygon using measurement and by inductive reasoning.</li> <li>• classifies triangles according to their angles and sides.</li> </ul>	<p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 8: Polygons</li> <li>• LAS 9: Triangles</li> <li>• Quiz</li> </ul>
WEEK7	<ul style="list-style-type: none"> <li>• Sides and Angles of a Triangle</li> </ul> <p>Values on Focus: -Recognize the life and contribution of Pythagoras and others.</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• derives relationships among the sides and angles of a triangle using measurement and by inductive reasoning.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Mix-Pair Discuss</li> <li>• Clarification Pauses</li> <li>• Math Focus</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 10: Sides and Angle of a Triangle</li> </ul>
WEEK8	<ul style="list-style-type: none"> <li>• Quadrilaterals</li> </ul> <p>Values on Focus: -Recognize the importance of being diligence</p>	<p>The learner...</p> <ul style="list-style-type: none"> <li>• illustrates, and identifies the different kinds of quadrilaterals.</li> <li>• derives relationships among the angles and among the sides of a polygon using measurement and by inductive reasoning.</li> </ul>	<p>Formative:</p> <ul style="list-style-type: none"> <li>• Large Group Discussion</li> <li>• Follow-up Practice(exercise given in the textbook)</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 11: Quadrilaterals</li> </ul>
WEEK9	<ul style="list-style-type: none"> <li>• Circles</li> </ul>	<p>The learner...</p>	<p>Formative:</p>

	<p>Values on Focus:          -Recognize the love for knowledge.</p>	<ul style="list-style-type: none"> <li>• <b>M7GE-IIIg-1:</b> illustrates a circle and the terms related to it such as radius, diameter, center, arc, chord, central angle and inscribed angle.</li> </ul>	<ul style="list-style-type: none"> <li>• Large Group Discussion</li> <li>• Triad</li> </ul> <p>Summative:</p> <ul style="list-style-type: none"> <li>• LAS 12: Circles</li> <li>• Long Test</li> <li>• Performance Task #2</li> </ul>
WEEK10	Fourth Quarter Examination		