Course Outline*: GRADE 8 MATHEMATICS*
School Year : **2013 – 2014**

FIRST QUARTER		
Peace Integration Theme: Harmony with Self (Personal Peace)		
TIME FRAME	**CONTENT**	**REFERENCES**
	SPECIAL PRODUCT AND FACTORS	
Week 1	Polynomials	TB:pp.1-7
	Product with Monomials	TB:pp.8-13
	Product of two or more Polynomials	TB:pp.14-19
Week 2	Division of Monomials	TB:pp.20-24
	Division of Polynomials by another Polynomials	TB:pp.25-31
	Special Product	TB:pp.32-42
Week 3	Factoring Polynomials	TB:pp.43-49
	Difference of two square	TB:pp.50-56
	Sum and Difference of two Cubes	TB:pp.57-61
Week 4	Factoring Perfect Square Trinomials	TB:pp.62-67
	Factoring Quadratic Trinomials	TB:pp.68-75
	Factoring Trinomials	TB:pp.76-85
	RATIONAL EXPRESSION	
Week 5	Rational Expressions	TB:pp.90-93
	Simplifying Rational Expressions	TB:pp.94-100
Week 6	Multiplying and Dividing Rational Expressions	TB:pp.101-110
	Adding and Subtracting Rational Expression	TB:pp.111-119
Week 7	Adding and Subtracting with Unique Complex Fraction	TB:pp.120-126
	Equation Involving Rational Expression	TB:pp.127-134
Project	*Special Products and Factoring, and Rational Expressions Brochure*	

TIME FRAME	CONTENT	REFERENCES
	SECOND QUARTER	
	Peace Integration Theme: Harmony with Creation	
	INTEGRAL EXPONENT	
Week 1	Bases and Exponent	TB:pp.144-148
	Multiplication Property of Exponent	TB:pp.149-156
	Division Property of Exponent	TB:pp.157-161
Week 2	Zero Exponent and Negative Exponent	TB:pp.162-168
	Exponential Equation	TB:pp.169-172
	LINEAR EQUATION IN TWO VARIABLES	
Week 3	Rectangular Coordinate System	TB:pp.176-183
	Linear Equation in Two Variables	TB:pp.184-190
Week 4	Relation and Function	TB:pp.191-217
Week 5	Graphing Linear Equations	TB:pp.218-242
	Writing Equations of Lines	TB:pp.243-255
	SOLVING LINEAR EQUATIONS AND INNEQUALITIES	
Week 6	Systems of Linear Equations and their Solutions	TB:pp.260-266
	Solving Linear Equations by Graphing	TB:pp.267-276
Week 7	Solving Linear System by Substitutions	TB:pp.277-285
	Solving System of Linear Elimination	TB:pp.286-298
Week 8	Solving System of Linear Inequalities	TB:pp.299-308
Project	**Field Trip**	

THIRD QUARTER		
Peace Integration Theme: Harmony with Others		
TIME FRAME	**CONTENT**	**REFERENCES**
	PROOFS	
Week 1	If-then Statement with Writing a Proof	TB:pp.315-326
	Inductive and Deductive Reasoning	TB:pp.415-421 Ref.1 pp.233-239
	TRIANGLE CONGRUENCE	
Week 2	Congruent Triangles	TB:pp.327-335
	Proving Triangle Congruent(SSS Postulate)	TB:pp.336-341
	The SAS and ASA Congruence Postulates and SAA Theorem	TB:pp.342-353
Week 3	Congruent Right Triangles	TB:pp.354-370
Week 4	Theorems on Isosceles Triangles	TB:pp.371-378
Week 5	Triangle Inequality	TB:pp.379-389
Week 6	Parallelism and Perpendicularity	TB:pp.390-400 Ref.1 pp.594-576
Week 7	Ways of Proving that Quadrilaterals are Parallelogram	TB:pp.401-410 Ref.1 pp.517-585
Project	*Build me, defend me: Triangular Table Construction*	

FOURTH QUARTER		
Peace Integration Theme: Living Harmoniously		
TIME FRAME	**CONTENT**	**REFERENCES**
	STATISTICS	
Week 1	Measures of Central Tendency Of Ungrouped Data	Ref.1 pp.604-606
Week 2	Measures of Variability and Dispersion of Ungrouped Data	Ref.1 pp.618-621,623-626
Week 3	Measures of Central Tendency Of Grouped Data	TB:pp.415-424
Week 4		
Week 5	Measures of Variability and Dispersion of Grouped Data	TB:pp.425-443
Week 6		
	PROBABILITY	
Week 7	Basic Concept of Probability	TB:pp.444-446 Ref.2 pp.397-403
Week 8	Fundamental Principle of Counting	Ref.1 pp. 646-650 Ref.2 pp.404-417
Week 9	Probability of an Event	TB:pp.446-456 Ref.1 pp.653-657
Project	*Soda Survey*	

Textbook(TB):

RBS Mathematics Series e-Math 8(K to 12) First Edition 2013: Rex Book Store, Inc.(RBSI)
By: Orlando A. Oronce & Marlyn O. Mendoza

References(R):

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2. Lim, Y. et al (2012). Math for Engaged Learning (the New Grade 8). Quezon City: SIBS Publishing House, Inc
3. Larson,M.,et.al.(2012) Larson Algebra 2 Houghton Mifflin Harwurt Publishing Company; USA
4. Baratto , S. Bergman , B. (2008) Elementary and Intermediate Algebra. A United Approach, Third Edition. Mc Graw Hill International Edtion: United States
5. Stefan Waner and Steven R. Lostenoble (2007) finite Mathematics 4th Edition Thomson Books/cole: China
6. Lial, M.,et. Al (2004) Algebra ninth edition. Pearson Edition: USA
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Websites (WS):

1.) http://kballardmath.weebly.com/algebra.html
2.) www.rexinteractive.com
3.) http://www.balucamath.tripod.com

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