Math 20-1 – Unit 1
Quadratic Functions

DAY 1	DAY 2	DAY 3	DAY 4
3.1 Quadratic Functions (Vertex Form) - a ,p , & q values - Max/Min - Domain & Range - Axis of Symmetry - x and y intercepts	**3.1(CONT'D)** Quadratic Functions (Vertex Form) - Writing equations - # of solutions	**3.2** Quadratic Functions (Standard Form) - Intercepts - Graphical approach - Applications	**Quiz**
Assignment #1 **Page 157** #1, 2, 4, 6, 7	Assignment #2 **Page 157** #3, 5, 8 -12, 14, 16 (a & c), 21	Assignment #3 **Page 174** #2, 3, 4, 6, 8 - 10, 12, 15	

DAY 5	DAY 6	DAY 7	DAY 8
3.3 Completing the Square - Determining the vertex - Converting between forms	**3.3** Word Problems - Maximum and Minimum application problems	**Review** **Page 198** #2a, 4 (b & d), 5 b, 8, 12, 14 (a & d), 16, 17	**UNIT TEST**
Assignment #4 **Page 192** #1 – 5 (a & b), 6 - 8 (a & c), 9, 12 - 14	Assignment #5 **Page 194** #16, 18, 19, 21, 23, 24, 30	Assignment #6 **Page 201** #1 - 6, 7 (a & b), 8, 9 a, 10, 11, 13, 16	

Evaluation:

Homework – 10%   Quiz – 20%   Test – 70%

Math 20-1 – Unit 2
Quadratic Equations

DAY 1	DAY 2	DAY 3	DAY 4
4.1 Solving Quadratic Equations - Graphically - x - intercepts - zeros - number of solutions --- Assignment #1 **Page 215** #1 – 8, 11	4.2 Factoring Quadratic Equations - Review of factoring methods - Using factoring to solve --- Assignment #2 **Page 229** #1 – 10 (a & c only) **Page 231** #11 – 15, 17, 20, 26, 30	4.3 Solving Quadratics by Completing the Square - Square roots - Applications of completing the square --- Assignment #3 **Page 240** #4 – 6 (a & c), 7 (a, c & e), 10, 11	*Review*

DAY 5	DAY 6	DAY 7	DAY 8
Quiz	4.4 Solving Quadratics using the Quadratic Formula - Use the formula - Discriminant - Simplifying the solution(s) --- Assignment #4 **Page 254** #1 – 5 (a, c & e), 10, 12, 14	*Review* (In Class) **Page 258** #1 c , 5, 7 – 9 (a & c), 11, 14(c & d), 15 a, 18 – 19 (a & c), 20 --- Assignment #5 **Page 261** #1-10,12 - 14	*UNIT TEST*

Evaluation:

Homework – 10%   **Quiz – 20%**   **Test – 70%**

Math 20-1 – Unit 3
Systems of Equations & Inequalities

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
8.1	8.2	8.2		
Solving Systems Graphically - Linear-Quadratic & Quadratic-Quadratic - Solving graphically ~ by hand & technology - Number of solutions ~ one, none or ∞	**Solving Systems Algebraically** - Linear-Linear & Linear-Quadratic - Solving by Substitution and Elimination - Number of solutions ~ one, none or ∞	**Solving Systems Algebraically & Graphically** Applications Extraneous Solutions	*Review* *Quiz*	*Quiz*
Assignment #1 **Page 435** #2, 3, 4(a, c & d), 5(a, b & e), 6, 8, 13	Assignment #2 **Page 451** #1, 3, 4, 5, 8, 9, 10	Assignment #3 **Page 436** #7, 15, 20	Assignment #4 **Page 457**	

DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
9.1	9.2		9.3	
Linear Inequalities in Two Variables - Graphing - Test Points - Solutions	**Quadratic Inequalities in One Variable** - Graphing - Intervals - Solutions	*Quiz*	**Quadratic Inequalities in Two Variables** - Graphing - Intervals - Test Points - Word Problems	*Review*
Assignment #5 **Page 472** #2(a & c), 3 - 5(b, c & d) 9, 11, 13	Assignment #6 **Page 484** #4(a & c), 7 - 9(a & c), 12, 13, 15(a & b)		Assignment #7 **Page 496** #1b, 3, 4(a & b), 6, 8, 9, 11, 13, 16	Assignment #8 **Page 459,** **Page 501,** **Page 504**

DAY 11 – Unit Test

Evaluation:

Math 20-1 – Unit 4
Radical Expressions & Equations

DAY 1	DAY 2	DAY 3	DAY 4
5.1	5.2	5.2 (continued)	
Working with Radical Expressions - Converting between Entire & Mixed Radicals - Ordering Radicals - Adding & Subtracting - Simplifying Radicals - Restrictions - Problem Solving	**Multiplying and Dividing Radical Expressions** - Monomials - Binomials - Rationalizing Monomial Denominators	**Multiplying & Dividing Radical Expressions** - Rationalizing Denominators - Problem Solving - Literal Coefficients	QUIZ
<u>Assignment #1</u> **Page 278** #1 - 10 , 14, 16, 18 - 20 **Worksheet A**	<u>Assignment #2</u> **Page 289** #1 - 8, 12, 15, 19-21	<u>Assignment #3</u> **Page 289** #9 - 11, 13, 14, 17 **Worksheet B**	

DAY 5	DAY 6	DAY 7	DAY 8
5.3			
Solving Radical Equations - One Radical - Two Radicals - Extraneous Roots - Problem Solving	In class Unit Assignment	REVIEW	UNIT TEST
<u>Assignment #4</u> **Page 300** #1(b & d), 2 - 5, 6 - 9(a & c), 10, 12, 14 - 17	<u>Assignment #5</u> **Page 304** #1(a – d), 2(c & d),3(b & c), 4a, 6 - 8, 10c, 11(a & c), 13(a, b & c), 14(a & c), 17, 19(a & e)	<u>Assignment #6</u> **Page 306** #1 - 19	

Evaluation:

Homework – 10%   Quiz – 20%   Test – 70%

Math 20-1 – Unit 5
Rational Expressions & Equations

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
6.1	6.2	6.2 cont.	6.3	6.3 cont.
Rational Expressions - Non-permissible Values - Simplifying Rational Expressions	Multiplying Rational Expressions - Multiplying Rationals - Non-permissible Values	Dividing Rational Expressions - Dividing Rationals - Non-permissible Values	Adding & Subtracting Rational Expressions - With common monomial & binomials denominators - With monomial unlike denominators	Adding & Subtracting Rational Expressions - With unlike denominators - Monomial, Binomial & Trinomial denominators
Assignment #1 **Page 317** #3 – 9, 13, 20, 25 **Worksheet A**	Assignment #2 **Page 327** #1, 2, 5, 7	Assignment #3 **Page 327** #3, 6, 8, 9, 14, 15 **Worksheet B**	Assignment #4 **Page 336** #1, 2, 4 (a & b), 5	Assignment #5 **Page 336** #3, 4 c, 6 – 9, 10a
DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
	6.4	6.4 cont.		
Review Worksheet C _Quiz_	Rational Equations - Solving Rational Equations	Rational Equations - Problem Solving	_Review_	_Unit Test_
	Assignment #6 **Page 348** #2 – 8	Assignment #7 **Page 348** 9 -14, 17, 19, 25 a		

Evaluation:
Quiz – 20%   Test – 80%

Math 20-1 – Unit 6
Absolute Value and Reciprocal Functions

DAY 1	DAY 2	DAY 3	DAY 4
7.1 Absolute Value - Determine the absolute value of a number - Compare and order absolute values - Evaluate absolute value expressions	7.2 Absolute Value Functions Linear and Quadratic absolute value functions - Graphing an Absolute Value Function - Piecewise Notation - Invariant Point - Domain and Range	-7.3 Absolute Value Equations - Solving Graphically - Solving Algebraically - Types of Solutions - Absolute Value of Quadratics	QUIZ
Assignment #1 **Page 363** 1(a, c & e), 2, 3, 4, 5(a & c), 6(c, d & e), 7, 8, 11, 15, 16	Assignment #2 **Page 375** 1 - 5, 6(a, b & d), 7, 8(a, c & d), 9(a & b), 10(a & c), 11(a, b & d), 13, 16*challenge	Assignment #3 **Page 389** 1, 2(a & c), 4, 5(a - d),6, 11, 15, 22, 23	

DAY 5	DAY 6	DAY 7	
7.4 Reciprocal Functions - Compare the graph of a Function and its Reciprocal - Asymptotes - Domain and Range - Invariant Points - Graph the Reciprocal of Linear and Quadratic Functions	Review (In Class) **Page 413** #1 - 11a	UNIT TEST	
Assignment #4 **Page 403** 1, 2(a & c), 3, 4, 5(a, b & d), 6a, 7(a & d), 8a, 9, 10	Assignment #5 **Page 410** Odds		

Evaluation:
Quiz – 25%   Test – 75%

Math 20-1 – Unit 8
Sequences and Series

DAY 1	DAY 2	DAY 3	DAY 4
1.1	1.2	1.3	
Arithmetic Sequences	Arithmetic Series	Geometric Sequences	
- General Terms - Common Difference - Number of terms	- Sum Formula (both) - Number of Terms	- General Term - Common Term - Common Ratio	Quiz
Assignment #1: **Page 16** #1 – 6, 7 - 9, 11, 13, 16	Assignment #2: **Page 27** #1 – 6(a & c), 7 - 13, 21, 23	Assignment #3: **Page 39** #1, 3 - 5, 8, 9, 10, 12, 23	

DAY 5	DAY 6	DAY 7	DAY 8
1.4	1.5		
Geometric Series	Infinite Geometric Series		
- Determine Sum - Determine t_1, r, n & S_n	- Sum of Infinite - Convergent & Divergent	Review	UNIT TEST
Assignment #4 **Page 53** #1 – 4, 6 – 8, 10 - 11, 13	Assignment #5 **Page 63** #1 – 3, 5, 6 – 13, 15	Assignment #6: **Page 66**	

Evaluation:
Quiz – 20%   Test – 80%

Math 20-1 – Unit 9
Trigonometry

DAY 1	DAY 2	DAY 3	DAY 4
2.1	2.1/2.2	2.2	
Angles in Standard Position	**Trig Ratios & The Cast Rule**	**Trig Ratios – Exact Values Special Triangles**	Quiz
• Trig Review (10-C) • Sketch an Angle in Standard Position • Determine the Reference Angle • Determine the Quadrant of an angle	• Finding Trig Ratios where $0° \leq x \leq 360°$ • Finding Quadrantal Angles • CAST Rule	• Solve an Angle and Give its exact sine, cosine and tangent value • Finding Quadrantal Angles	
<u>Assignment #1:</u> **Page 83** #1 – 6(all), 7, 9, 10	<u>Assignment #2:</u> Cast Worksheet **Page 96** #1, 3 - 8(a & c), 11a, 12, 16	<u>Assignment #3:</u> **Page. 83** **#8, 13** **Page 96** #2, 3d, 9, 10, 18, 19, 21(a & b), 25, 29	

DAY 5	DAY 6	DAY 7	DAY 8
2.3	2.4		
Sine Law/ Ambiguous Case/ # of Solutions	**Cosine Law**	Review	UNIT TEST
• Determine an unknown side and angle • Describe and explain situations where a problem may have no solution, or one or two solutions • Describe ambiguous case	• Determine an unknown side • Determine an unknown angle		
<u>Assignment #4</u> **Page 108** #2, 3(all), 4(b & d), 5(a & d), 6, 8, 9, 11, 12, 13, 17	<u>Assignment #5</u> **Page 119** #1 - 3(a & b), 4(a & d), 5(all), 7, 10, 15, 17, 19, 20	<u>Assignment #7</u> **Page 126**	

Evaluation: Quiz – 20%   Test – 80%