OUTCOMES	ASSESSMENT RUBRICS			
P20.1 Demonstrate understanding of the absolute value of real numbers, equations, and functions involving the absolute value of linear and quadratic functions.				
Level / Criteria	Beginning Spend some extra time with the criteria and ask for help.	Approaching Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	Proficient You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	Mastery Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 7a I can demonstrate an understanding of the absolute value of real numbers. I can graph and analyze absolute value functions to solve problems.	I need more help with becoming consistent with the criteria.	I can determine the absolute value of a real number. I can order a set of real numbers. I can simplify expressions involving absolute value with one or two steps I can create a table of values for an absolute value function. I can sketch the graph of $y = |f(x)|$ given the graph of f(x). I can determine the intercepts, domain and range, given its graph. I can algebraically determine the solution set of an equation involving absolute values.	I can describe the relationship between the graph of y=f(x) and its absolute value. I can determine the intercepts, domain and range, given its equation. I can algebraically determine the solution set of a complex equation involving absolute values including those with extraneous roots. My solutions may involve simplifying errors.	I can complete level 2 and 3 questions with no errors. I can explain with the use of examples how absolute value fits into the order of operations. I can identify and correct errors in a solution I can solve situational questions

OUTCOMES	ASSESSMENT RUBRICS			
P20.2 Expand and demonstrate understanding of radicals with numerical and variable radicands including: computations, solving equations (limited to square roots and one or two radicals).				
Level Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 5a I can solve problems that involve operations on radicals and radical expressions with numerical and variable radicands.	I need more help with becoming consistent with the criteria.	I can express entire radicals as mixed radicals and vice versa. I can order a set of real numbers which includes radical expressions. I can simplify basic radical expressions I can rationalize a square root monomial denominator	I can solve more complicated radical expressions I can rationalize cube root and binomial denominators I can determine the values of a variable for which a given radical expression is defined	I can explain level 2 and 3 questions I can solve situational questions. I express all answers in simplest terms No mistakes.
Outcome 5b I can solve problems that involve radical equations (limited to square roots)	I need more help with becoming consistent with the criteria.	I can determine and verify solutions of basic radical equations that can be simplified to a single radical and constant term.	I can determine and verify solutions of radical equations containing unlike radicals or quadratic results.	I can solve situational questions. I can identify extraneous solutions. No mistakes.

OUTCOMES	ASSESSMENT RUBRICS			
	**P20.3 Expand and demonstrate understanding of rational expressions and equations (up to and including degree 2 numerators and denominators) including: equivalent forms of expressions, operations on expressions, solving equations that can be simplified to linear or quadratic equations.**
Level Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 6a I can determine equivalent forms and perform operations on rational expressions	I need more help with becoming consistent with the criteria.	I can determine equivalent rational expressions. I can verify whether or not a value is permissible or not. I can determine non-permissible values. I can simplify basic rational expressions including multiplying, dividing, and adding and subtracting (with common denominators)	I can demonstrate the process of: I can add and subtract rational expressions without common denominators. I can simplify rational expressions that involve 2 or more operations.	I can explain level 2 and 3 questions and list all non-permissible values I can solve situational questions when not given the expression I express all answers in simplest form.
Outcome 6b I can solve equations that involve rational expressions.	I need more help with becoming consistent with the criteria.	I can solve equations involving rational expressions with only simplification errors.	I can solve equations involving rational expressions with limited or no errors. I can verify why a value may not be a solution.	I can solve situational questions when not given the equation.

OUTCOMES	ASSESSMENT RUBRICS			
P20.4 Expand and demonstrate understanding of the primary trigonometric ratios including the use of reference angles and the determination of exact values for trigonometric ratios.				
Level Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 2a I can demonstrate understanding of standard position, primary trig ratios including the use of reference angles and the exact values for trig ratios	I need more help with becoming consistent with the criteria.	I can demonstrate understanding of: - standard position of an angle and quadrants - (+/-) signs of trig ratios and the CAST rule - location of angles on the coordinate plane I can **determine** and apply reference angles I can determine exact trig values given a point on the terminal arm	I can determine exact trig values given an angle with the use of special triangles I can solving basic trig equations such as sin B = a	Solve a contextual problem, using trig ratios. Identify angles for which the tangent ratio does not exist and explain why.

OUTCOMES	ASSESSMENT RUBRICS			
P20.5 Demonstrate understanding of the cosine law and sine law, including the ambiguous case.				
Level Criteria	Beginning Spend some extra time with the criteria and ask for help.	Approaching Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	Proficient You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	Mastery Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 2b I can demonstrate understanding of the cosine and sine law, including the ambiguous case.	I need more help with becoming consistent with the criteria.	I can solve for a missing side or angle (excluding ambiguous case) when the diagram is given (including those in situational questions)	I can solve situational questions involving non right triangles (excluding the ambiguous case). I can determine the missing side or angle in a given triangle involving the ambiguous case.	I can explain the steps in a proof of the sine law and cosine law. I can illustrate and explain the possibilities for a given set of measurements for the ambiguous case. I can perform error analysis. I can solve situational problems that involve the ambiguous case.

OUTCOMES	ASSESSMENT RUBRICS			
P20.6 Expand and demonstrate understanding of factoring polynomial expressions including those of the form a^2x^2-b^2y^2, a(f(x))^2 - b(f(x))^2, a^2(f(x))^2 - b^2(f(x))^2 where a, b, and c are rational numbers.				
Level Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 4a I can factor polynomial expressions of the forms: $a^2x^2 - b^2y^2, da^2x^2 - db^2y^2, a(f(x))^2 - b(f(x)) + c, da(f(x))^2 - db(f(x)) + dc, a^2(f(x))^2 - b^2(g(y))^2$ and $da^2(f(x))^2 - db^2(g(y))^2$	I need more help with becoming consistent with the criteria.	I can demonstrate the process of factoring single-step expressions.	I can factor multi-step expressions. I can demonstrate the process of factoring composite functions.	I can fully factor composite functions without error and write all answers in simplified form.

OUTCOMES	ASSESSMENT RUBRICS			
P20.7 Demonstrate understanding of quadratic functions of the form y=ax^2+bx+c and of their graphs including vertex, domain, range, direction of opening, axis of symmetry, x and y intercepts				
Level \ Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 3a I can analyze quadratic functions of the form $y = a(x - p)^2 + q$. I can find the vertex, domain and range, direction of opening, axis of symmetry, and number of x and y intercepts.	I need more help with becoming consistent with the criteria.	I can find the coordinates of the vertex; describe the width, and the direction of opening.	I can find the domain and range, axis of symmetry and the number of x intercepts. I can write a quadratic function that represents a given graph or set of characteristics.	I can explain and do level 2 and 3 questions without any errors.
Outcome 3b I can analyze quadratic functions of the form $y = ax^2 + bx + c$. I can find the vertex, domain and range, direction of opening, axis of symmetry, and x and y intercepts.		I can find 5/7 of the following: vertex, domain and range, axis of symmetry, y intercepts, the number of x intercepts and direction of opening	I can sketch the graph of a quadratic function in this form. I can find 7/7 characteristics. I can change an equation from standard to vertex form.	I can explain level 2 and 3 questions. I can evaluate a quadratic function that models a given situation and explain any assumptions. I can identify and correct errors in a given example of

completing the square.

OUTCOMES	ASSESSMENT RUBRICS			
P20.8 Demonstrate understanding of quadratic equations including the solutions of: single variable equations, systems of linear quadratic and quadratic-quadratic equations in two variables.				
Level / Criteria	<u>Beginning</u> Spend some extra time with the criteria and ask for help.	<u>Approaching</u> Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	Proficient You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	<u>Mastery</u> Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 4b: I can solve single variable quadratic equations.	I need more help with becoming consistent with the criteria.	I can solve factorable quadratic equations using any method I can solve quadratic equations given a graph	I can solve quadratic equations which are not factorable using multiple methods, including factoring, completing the square and the quadratic formula. I can use the discriminant to determine the number of real roots for quadratic equation.	I can articulate the advantages / disadvantages of different strategies I can identify and correct any errors within a solution. I can factor using completing the square I express all answers in simplest form.
Outcome 8a: I can, algebraically and graphically, solve problems that involve systems of linear-quadratic and	I need more help with becoming consistent with the criteria.	I can determine the number of solutions to a system given the graph. I can solve linear	I can solve quadratic-quadratic systems algebraically.	I can do level 2 and 3 questions without any errors. I can solve situational questions involving systems of equations.

quadratic-quadratic equations in two variables.		quadratic systems algebraically. I can state the solution to a system of equations given the graph.		I can illustrate how a system may have zero, one, two or an infinite number of solutions.

OUTCOMES	ASSESSMENT RUBRICS			
P20.9 Expand and demonstrate understanding of inequalities including: one variable quadratic inequalities, two variable linear and quadratic inequalities				
Level / Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 9a: I can solve problems that involve linear and quadratic inequalities in two variables.	I need more help with becoming consistent with the criteria.	I can use test points to determine the solution region. I can correctly use a solid or broken line when graphing a solution. I can determine the solution region for two variable linear inequalities.	I can determine the solution region for two variable quadratic inequalities. I can solve situational questions where the inequality is not given.	I can do level 2 and 3 questions without any errors. I can explain level 2 and 3 questions
Outcome 9b: I can solve problems that involve quadratic inequalities in one variable.	I need more help with becoming consistent with the criteria.	I can apply a strategy such as case analysis, graphing, roots and test points, or sign analysis to solve one variable inequalities. I may not use proper notation to identify the correct interval	I can solve situational questions involving a one variable inequality	I can explain level 2 and 3 questions. I use proper notation to identify the interval.

OUTCOMES	ASSESSMENT RUBRICS			
P20.10 Demonstrate understanding of arithmetic and geometric (finite and infinite) sequences and series.				
Level Criteria	Beginning Spend some extra time with the criteria and ask for help.	Approaching Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	Proficient You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	Mastery Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 1a: I can analyze arithmetic sequences and series to solve problems	I need more help with becoming consistent with the criteria.	I can generate an arithmetic sequence from provided information. I can identify whether a series is arithmetic or not. I can correctly substitute to find a, n, d, or t_n involving single steps, but may contain small errors.	I can determine a, n, d, or t_n in situational questions. I can do multistep substitutions.	I can do level 2 and 3 questions without any errors. I can explain level 2 and 3 questions
Outcome 1b: I can analyze geometric sequences and series to solve problems	I need more help with becoming consistent with the criteria.	I can generate a geometric sequence from provided information. I can identify whether a series is geometric or not. I can find a, n, r, or t_n involving single steps, but may contain small errors.	I can determine a, n, r, or t_n in situational questions. I can do multistep substitutions.	I can do level 2 and 3 questions without any errors. I can explain level 2 and 3 questions

OUTCOMES	ASSESSMENT RUBRICS			
P20.11 Demonstrate understanding of reciprocal functions of linear functions, quadratic functions				
Level / Criteria	**Beginning** Spend some extra time with the criteria and ask for help.	**Approaching** Good start. You are beginning to make sense of this on your own. You are consistent with the basic learning goals for this outcome.	**Proficient** You did it and you did it on your own. You are able to complete the processes for this outcome. Your work is thorough and consistently accurate.	**Mastery** Great work! This is going extra well for you. You have understood the outcome, are able to explain your strategies and apply these to situations. Your work is always accurate.
Outcome 7c I can graph and analyze reciprocal functions.	I need more help with becoming consistent with the criteria.	I can determine the non-permissible values. I can find the equation of the reciprocal given y=f(x) and vice versa. I can graph the reciprocal given the graph of y=f(x).	I can sketch the graph of a reciprocal function given the equation y=f(x)	I can complete level 2 &3 questions with no errors. I can explain level 2 and 3 questions.