Weekly Lesson Plans

Course: Algebra 2 CP	**Period(s): 3 and 4**	**Teacher(s): Mrs. Cecere**
If you have questions, please feel free to email me: mcecere @greenville.k12.sc.us **or leave me a message at** 355-6593		
	Link to Course Syllabus	Link to Course Standards

Quarter 1		Quarter 2	
Week 1 Aug 11 - 15	BookmarkWeek 6 Sept 15 - 19	Week 10 Oct 13 - 17	Week 15 Nov 17 - 21
Week 2 Aug 18 - 22	Week 7 Sept 22 - 26	Week 11 Oct 20 - 24	Week 16 Nov 24 - 28
Week 3 Aug 25 - 29	Week 8 Sept 29 - Oct 3	Week 12 Oct 27 - Oct 31	Week 17 Dec 1 - 5
Week 4 Sept 1 - 5	Week 9 Oct 6 -10	Week 13 Nov 3 - 7	Week 18 Dec 8 - 12
Week 5 Sept 8 - 12		Week 14 Nov 10 - 14	Dec 15 - 19

Week: Aug 11 - 15	Unit(s): Chapter 1

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Students will be given first day information and get to know each other	Students will be given team activities to help support the learning environment for the semester	Students will be given notes on functions and their characteristics	Students will be given notes on transformations of functions	Students will be given notes on piecewise functions
Work to Submit			Functions worksheet - To be turned in on day of quiz	Transformation worksheet- To be turned in on day of quiz	Piecewise worksheet- to be turned in on day of quiz
Learning Target	I can name 5 students and describe something about them	I can work in a team to accomplish a goal	I can describe where a graph increases/decreases I can find domain/range from a graph	I can graph using transformations I can write an equation from a graph	I can graph piecewise functions I can evaluate a piecewise function

Standards for the Week
A2P.PAFR.4.1 Identify the effect on the graph of replacing f(x) by kf(x), f(x)+k, f(x-k), f(kx) for any real number k including multiple transformations; write an equation of a transformed parent function given its graph. Extend to equations involving rational, polynomial, radical, exponential, and piecewise.

Week: Aug 18 - 22	Unit(s):Chapter 1

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Students will finish transformations and take notes on piecewise functions	Students will finish piecewise functions and review for quiz	Students will review for quiz and take quiz	Students will take notes on sequences and series	Students will take notes on equations and inequalities
Work to Submit	Transformation worksheet to be turned in on quiz day	Piecewise worksheet to be turned in on quiz day	Review worksheet		
Learning Target	I can describe how a graph is transformed from its parent function	I can graph a piecewise function		I can find the next three terms in an arithmetic sequence. I can find the sum of an arithmetic sequence	I can solve equations and inequalities by graphing

Standards for the Week	
	A2P.PAFR.3.2 Find the sum of the terms of arithmetic and geometric sequences.

Week: Aug 25 - 29	Unit(s): Chapter 1

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Review sequence, series and inequalities	Students will take quiz and then work on online book practice	Students will get back two quizzes and review for chapter 1 test	Students will take test chapter 1 and work on online book practice	Students will complete online book practice for chapter 1
Work to Submit	Worksheet due day of quiz		Worksheet due day of test		Online book practice due for chapter one
Learning Target	I can find the sum of an arithmetic series	I can solve inequalities by graphing			

Standards for the Week
A2P.PAFR.4.1. Arithmetic sequences and Series **A2P.PAFR.1. Explore and analyze quadratic** and **polynomial functions and** inequalities

Week: Sept 1 - 5	Unit(s): Chapter 2 (quadratic functions)

	Monday School Holiday	Tuesday	Wednesday	Thursday	Friday
Agenda		Students will take notes on forms and characteristics of quadratics	Students will work on forms and characteristics activity	Students will take notes on solving quadratics by graphing	Students will take notes on factoring
Work to Submit		Practice worksheet to be turned in on quiz day	they will work together and will be a minor grade.	Practice worksheet to be turned in on quiz day	Practice sets (computer practice) To be turned in by quiz day
Learning Target		I can describe three forms of quadratics (factored, standard, vertex)		I can graph a quadratic in standard or vertex form	I can factor using gcf, trinomial or difference of square methods

Standards for the Week
A2P.PAFR.1.1 Graph, identify roots, and analyze quadratic functions in mathematical and real-world situations. A2P.PAFR.1.2 Solve quadratic equations in one variable that have complex solutions.

Week: Sept 8 - 12	Unit(s): solving quadratics

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Students will take notes on solving by factoring	Students will take notes on solving by quadratic formula	Students will take notes on complex numbers	Students will review all methods of solving quadratics, graphing, factoring and quadratic formula	Quiz solving quadratics
Work to Submit	Practice sets - in google classroom practice	Practice worksheet	Delta math practice	Practice worksheet	
Learning Target	I can factor with three methods, trinomial, gcf, and difference of squares	I can use quadratic formula to solve quadratic function	I can perform operations with imaginary numbers		

Standards for the Week

A2P.PAFR.1.1
Graph, identify roots, and analyze
quadratic functions in mathematical and real-world situations.
A2P.PAFR.1. Explore and analyze quadratic and polynomial functions
A2P.NR.1.2
Understand that there is an imaginary unit i such that $i^2 = -1$ and explain the structure of a complex number as $a + bi$, where a and b are real.
Add, subtract, and multiply complex numbers.

Week: Sept 15 - 19	Unit(s): Chapter 2 and 3

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Students will review for chapter 2 test	Students will take chapter 2 test	Students will take notes on polynomial characteristics #1	Students will take notes on polynomial characteristics #2	Students will finish matching activity and then work on chapter 3 online book practice
Work to Submit	Review worksheet and online book practice	Finish online book practice	Delta math on polynomial characteristics	Matching activity	
Learning Target			I can determine if a function is a polynomial	I can determine if a graph and an equation are equivalent	

Standards for the Week

A2P.PAFR.1. Explore and analyze quadratic and polynomial function

A2P.PAFR.4.1. Key features include intercepts and their multiplicity, end behavior, domain and range, intervals of increase and/or decrease, and intervals where the function is positive and/or negative. Discuss multiplicity and its relationship to the graph's behavior at these intercepts. To state key intervals, use interval and set notation.

Using all the zeros of a polynomial function, list and multiply all the factors to write a multiple of the polynomial function in standard form for no more than degree

Week: Sept 22 - 26	Unit(s):chapter 3

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Review for quiz Characteristics of polynomials	Quiz characteristics of polynomials	Notes sketching polynomials	Notes finding all zeros	Review for quiz
Work to Submit	Continue to work on chapter 3 online bookwork- due October 1	Chapter 3 online bookwork	Practice worksheet due Monday	Practice worksheet due Monday	
Learning Target			I can sketch a graph of a polynomial using the end behavior and zeros	I can factor or use quadratic formula to find all zeros	

Standards for the Week

A2P.NR.1. **Recognize** that **the** complex number **system extends the real number system** to **allow** for solution to **all polynomial equations.**

A2P.PAFR.4.1. Key features include intercepts and their multiplicity, end behavior, domain and range, intervals of increase and/or decrease, and intervals where the function is positive and/or negative. Discuss multiplicity and its relationship to the graph's behavior at these intercepts.

Using all the zeros of a polynomial function, list and multiply all the factors to write a multiple of the polynomial function in standard form for no more than degree

Week: Sept 29 - Oct 3	Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					

Standards for the Week	

Week: Oct 6 -10	Unit(s): Chapter 4 and 5

	Monday	Tuesday	Wednesday	Thursday	Friday End of Q1 Grading Period
Agenda	Review for radical and inverse quiz	PSAT-	Quiz	Notes rational graphs and simplify	Notes rational operations
Work to Submit	Worksheet- not to be turned in			Worksheet due on quiz day	Worksheet due on quiz day
Learning Target				I can find the vertical asymptote of a rational function	I can add, sub, multiply and divide rational functions

Standards for the Week

A2P.PAFR.2.1 Graph rational and radical functions and describe their key features. Limit to square roots and cube roots only.

A2P.PAFR.2.2 Perform arithmetic operations on rational expressions, including problems in context, and express rational expressions in irreducible form.

A2P.PAFR.2.3 Create and solve rational and radical equations in one variable, including those that model real-life situations, and verify solutions to identify extraneous solutions if they appear.

Indicator Insight

Refer to A2P.PAFR.4.1. Key features include intercepts, horizontal and vertical asymptotes (rational), domain, range,

Week: Oct 13 - 17	Unit(s): chapter 4 and 5

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	No school	Students will practice a delta math involving operations with rational functions	Students will take notes on solving rational equations	Students will review for quiz on rational functions	Quiz rational functions
Work to Submit		Delta math due quiz day	Worksheet due quiz day		
Learning Target		I can add/sub/mult/divide Rational expressions	I can solve a rational function equation		

Standards for the Week
A2P.PAFR.2.2 Perform arithmetic operations on rational expressions, including problems in context, and express rational expressions in irreducible form. A2P.PAFR.2.3 Create and solve rational and radical

Week: Oct 20 - 24	Unit(s):

	Monday Q1 Report Card	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					

Standards for the Week

Week: Oct 27 - Oct 31	Unit(s): chapter 6

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Review geometric sequence and graph exponential	Quiz	Solving exponential and compound interest	Review	Quiz
Work to Submit	Review worksheet	Online book practice chapter 6	Delta math practice	Worksheet	Online book practice
Learning Target	I can expand a geometric series and find their sum		I can use compound interest formulas		

Standards for the Week

A2P.PAFR.3.1 Create, solve, and graph exponential functions, including those that model real-life situations.
A2P.PAFR.3.2 Find the sum of the terms of arithmetic and geometric sequences.
Indicator *insight*
For real-world applications, consider using technology.
Introduce and incorporate e. **Refer** to A2P.PAFR.4.1.
Arithmetic: Use students' knowledge of linear functions to derive the "formula." Geometric: Use student knowledge of exponential furictions to derive the "formula."

Week: Nov 3 - 7	Unit(s): chapter 6

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda	Review chapter 6	Test chapter 6	VR lesson exponential functions	Real world project using exponential functions	Finish project
Work to Submit					To be turned in today
Learning Target	I can sole exponential equations			I can use the power of compound interest to understand financial literacy	

Standards for the Week

A2P.PAFR.3.1 Create, solve, and graph exponential functions, including those that model real-life situations.
A2P.PAFR.3.2 Find the sum of the terms of arithmetic and geometric sequences.
Indicator *insight*
For real-world applications, consider using technology.
Introduce and incorporate e. **Refer** to A2P.PAFR.4.1.
Arithmetic: Use students' knowledge of linear functions to derive the "formula." Geometric: Use student knowledge of exponential furictions to derive the "formula."

Week: Nov 10 - 14	Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					

Standards for the Week	

Week: Nov 17 - 21	Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					
Learning Target					

Standards for the Week	

Week: Nov 24 - 28	Unit(s):

	Monday	Tuesday	Wednesday School Holiday	Thursday School Holiday	Friday School Holiday
Agenda					
Work to Submit					

Learning Target		

Standards for the Week	

Week: Dec 1 - 5	Unit(s):

	Monday	Tuesday	Wednesday	Thursday	Friday
Agenda					
Work to Submit					

Learning Target					

Standards for the Week	

Week: Dec 8 - 12	Unit(s):

Agenda	Monday	Tuesday	Wednesday	Thursday	Friday

Work to Submit					
Learning Target					

Standards for the Week	

Week: Dec 15 - 19	Unit(s):

Monday	Tuesday	Wednesday	Thursday	Friday End of Q2 Grading Period Half Day for Students

Standards for the Week	Learning Target	Work to Submit	Agenda