

# Algebra Two Timeline for Macon Co. 2017-2018

## 1<sup>st</sup> Nine Weeks

Standard	Learning Target	Resources	T	M
A2.N.CN.A1	I can define the complex number $i$ is a number such that $i^2 = -1$ . (K)	Chapter 3		
A2.N.CN.A1	I can identify a complex number in the form $a + bi$ where $a$ and $b$ are real numbers. (K)	Chapter 3		
A2.N.CN.A2	I can perform complex number arithmetic. (S)	Chapter 3		
A2.N.CN.B3	I can solve quadratic equations with real coefficients that have complex solutions.	Chapter 3		
A2. A. REI. B3	I can solve quadratic equations. (S)	Chapter 3		
A2. A. REI. B3	I can express a complex solution to a quadratic equation in the form of $a \pm bi$ . (K)	Chapter 3		
A2. A. REI. B3	I can solve quadratic equations with complex solutions using the quadratic formula. (S)	Chapter 3		
A2. A. REI. C.5	I can solve a system consisting of a linear equation and a quadratic equation algebraically and graphically. (S)	Chapter 4		
A2. A. REI. D.6	I can approximate the solution to systems of linear equations graphically. (S)	Chapter 4		
A2. A. REI. D.6	I can explain that a point of intersection on the graph of a system of equations represents a solution to both equations. (K)	Chapter 4		
A2. A. REI. D.6	I can use technology to determine the approximate solution of a system of equations. (S)	Chapter 4		
A2. A. REI. C.4	I can solve systems of linear equations algebraically. (S)	Chapter 4		
A2. F.BF. A1.a	I can write an explicit and recursive expression of a function to describe real-world problems. (S)	Chapter 12		
A2. F.BF. A1.a	I can recognize the pattern of an expression to identify ways to rewrite it. (K)	Chapters 5/6		
A2. F.BF. A1.b	I can combine standard functions types using arithmetic operations.			
A2. APR.A.1	I can state the Remainder Theorem. (K)	Chapter 7		
A2. APR.A.1	I can apply the Remainder Theorem. (S)	Chapter 7		

A2. APR.A.2	I can identify the zeroes of a polynomial by factoring. (K)	Chapters 5/6		
A2. APR.A.2	I can sketch the graph of a polynomial by using its zeros. (S)	Chapters 5/6		
A2. APR.B.3	I can identify polynomial identities. (R)	Chapters 5/6		
A2. APR.B.3	I can apply polynomial identities to describe numeric relationships. (S)	Chapters 5/6		
A2.F.IF.B.3.b	I can graph polynomial functions by identifying zeroes and showing the end behaviors. (S)	Chapters 5/6		
A2.F.IF.B.5	I can compare the properties of two functions represented in different ways. (R)			
A2.F.BF.B.4	I can find the inverse of a function. (S)	Chapter 1		
A2.A.APR. C.4	I can rewrite rational expressions in different forms using inspection or long division. (K)	Chapters 5/6		
A2.A.REI.A.2	I can solve rational equations. (S)	Chapter 9		
A2.A.REI.A.2	I can illustrate how extraneous solutions may arise in rational equations. (R)	Chapter 11		

## 2<sup>nd</sup> Nine Weeks

Standard	Learning Target	Resources	T	M
A2.N.RN.A.2	I can rewrite radical expressions as a value with a rational exponent. (K)	Chapter 11		
A2.N.RN.A.2	I can rewrite a value with a rational exponent as a radical expression. (K)	Chapter 11		
A2.N.RN.A.2	I can apply the properties of exponents using rational exponents. (S)	Chapter 11		
A2.N.RN.A.1	I can explain how radical expressions and rational exponents correspond. (R)	Chapter 11		
A2.A.REI.A.2	I can illustrate how extraneous solutions may arise in radical equations. (R)	Chapter 11		
A2. F.IF.B.3a	I can graph square root and cube root functions, both by hand and using technology, showing the key features.	Chapter 11		
A2.A.SSE.B.2a	I can rewrite exponential functions using properties of exponents. (S)	Chapter 12		
A2.A.SSE.B.2a	I can use the properties of exponents to rewrite an exponential function. (S)	Chapter 12		
A2.A.SSE.B.2a	I can interpret the parts of an exponential function in terms of its context. (R)	Chapter 12		
A2.A.SSE.B.3	I can write the formula for a sum of finite geometric series.	Chapter 12		
A2.A.SSE.B.3	I can use the formula for a sum of finite geometric series to solve problems. (S)	Chapter 12		
A2.F.IF.B.3c	I can graph exponential and logarithmic functions showing intercepts and end behaviors. (S)	Ch 13 and 15		
A2.F.IF.B.4a	I can use the properties of exponents to rewrite an exponential function to reveal and explain different properties of the function. (S)	Ch 13 and 15		
A2.F.IF.B.5	I can compare the properties of two functions represented in different ways. (R)	Ch 13 and 15		
A2. F.BF. A1.a	I can write an explicit and recursive expression of a function to describe real-world problems. (S)	Ch 13 and 15		
A2. F.BF. A1.a	I can recognize the pattern of an expression to identify ways to rewrite it. (K)	Ch 13 and 15		

A2. F.BF. A1.b	I can combine standard functions types using arithmetic operations.	Ch 13 and 15		
A2. F.BF.A.2	I can define explicit and recursive expressions of a function. (K)	Chapter 12		
A2. F.BF.A.2	I can use arithmetic and geometric sequences to model situations. (S)	Chapter 12		
A2.F.LE.A.1	I can construct linear and exponential functions. (S)	Ch 13 and 15		
A2.F.LE.A.1	I can construct an explicit formula of arithmetic and geometric sequences.	Chapter 12		
A2. F.LE.A.2	I can solve an exponential equation and express the answer using logarithms. (S)	Chapter 16		
A2. F.LE.B.3	I can interpret the parameters in an exponential function in terms of a context.	Chapter 12		
A2. F.TF. A.1a	I can understand radian measure. (K)	Chapter 17		
A2. F.TF. A.1b	I can use the unit circle to find the trig ratios at common angle values.	Chapter 17		
A2. F.TF. A.2	I can use the unit circle to extend the domain of trig functions. (R)	Chapter 18		
A2. F.TF. B.3a	I can evaluate trig functions using the right triangle definitions given a point on the circle.	Chapter 18		
A2. F.TF. B.3b	I can find trig ratios given the quadrant the angle lies in and the Pythagorean identities.	Chapter 17		
A2. S. ID.A.1	I can use the mean and standard deviation to fit a normal distribution. (S)	Chapter 23		
A2. S. ID.A.1	I can estimate population percentages given the mean and standard deviation. (S)	Chapter 23		
A2. S. ID.B.2	I can draw a scatter plot and determine if a relationship exists. (R)	Chapter 14		
A2. S. ID.B.2	I can write a function for a scatterplot in a contextual situation.	Chapter 14		
A2.S.IC.A.1	I can determine the margin of error. (S)	Ch 22,23,24		
A2.S.IC.A.1	I can determine the sample mean or proportion. (S)	Ch 22,23,24		
A2.S.IC.A.2	I can determine the best method for finding a random sample. (R)	Ch 22,23,24		
A2.S.IC.A.2	I can explain the differences of sample surveys, experiments, and observational studies. (K)	Ch 22,23,24		
A2.S.IC.A.2	I can apply random sampling to draw a sample from a population. (P)	Ch 22,23,24		

A2.S. CP. A.1	I can define an event and sample space. (K)	Chapter 14		
A2.S. CP. A.1	I can define union, intersection, and complement. (K)	Chapter 14		
A2.S. CP. A.1	I can establish events as subsets of a sample space based upon the union, intersection, and/or complement of other events.	Chapter 14		
A2.S. CP. A.2	I can define and identify independent events. (K)	Chapter 14		
A2.S. CP. A.2	I can calculate the probability of an event. (S)	Chapter 14		
A2.S. CP. A.2	I can predict if 2 events are independent. (R)	Chapter 14		
A2.S. CP. A.3	I can define dependent events and conditional probability. (K)	Chapter 14		
A2.S. CP. A.3	I can calculate the conditional probability of an event. (S)	Chapter 14		
A2.S. CP. A.4	I can recognize and explain the concept of conditional probability and independent events using everyday examples. (R)	Chapter 14		
A2.S. CP. B.5	I can calculate the probability of the intersection of two events. (S)	Chapter 14		
A2.S. CP. B.6	I can apply the Addition Rule and interpret the answer.	Chapter 14		

# Ongoing Standards

Standard	Learning Target	Resources	T	M
A2. N. Q. A.1	I can define appropriate quantities for the purpose of descriptive modeling. (S)			
A2. A.SSE.A.1	I can recognize the pattern of an expression to identify ways to rewrite it. (K)	Chapters 5/6		
A2. A.SSE.A.1	I can apply models of factoring and multiplying polynomials to rewrite expressions. (S)	Chapters 5/6		
A2. A.SSE.A.1	I can explain why expressions are equivalent. (R)	Chapters 5/6		
A2. A.CED.A.1	I can create an inequality from a contextual situation. (P)			
A2. A.CED.A.1	I can create an equation from a contextual situation. (P)			
A2. A.CED.A.1	I can use created equations or inequalities to solve the problem. (S)	Ch 3, 12, 13		
A2. A.CED.A.2	I can rearrange formulas to highlight a quantity of interest, using the same reasoning as solving equations.			
A2.A.REI.A.1	I can construct an argument to justify a solution process. (R)			
A2.A.REI.A.1	I can explain each step in solving equations using the properties of equalities. (R)			
A2.F.IF.A.1	I can use the contextual situation to explain the meaning of the intercepts, extrema, end behaviors, and symmetries of a graph. (S)			
A2.F.IF.A.1	I can identify the intercepts, relative maximum or minimums, end behaviors, and symmetries of a graph. (K)			
A2.F.IF.A.2	I can interpret the meaning of rate of change in a contextual situation. (R)			
A2.F.IF.A.2	I can calculate the average rate of change of a function. (S)			
A2.F.BF.B.3	I can determine the value of k given a transformed graph. (S)	Chapter 1		
A2.F.BF.B.3	I can identify various transformations of a graph. (K)	Chapter 1		