Algebra I

Curriculum Guide

To support strong classroom instruction, the TDOE has created instructional focus documents for mathematics. These documents were developed to target the mathematics standards where statewide data indicated students struggled the most and are optional supplements for educators to consider. The purpose of these documents is to provide teachers with examples of learning across all performance levels to help educators determine the depth of a student's conceptual understanding of the Tennessee mathematics standards. You may access these documents using the ***Best for All Central*** website*:*
https://bestforall.tnedu.gov/lessons-and-learning-item?content-id=7321

Quarter 1				
Standard(s)	**Learning Objective(s)**	**Savvas Alignment**	**Assessments**	**Pacing**
Unit 1 Solving Equations and Inequalities				
A1.A.REI.A.1	• **Find the sum or product of two rational numbers and explain why the sum or product is rational.** • **Find the sum or product of a rational and irrational number and explain when the sum or product is irrational.**	**1-1 Operations with Real Numbers** **Pages 5-10**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 37 & 38** **3. Assigned Practice Selected Problems Pg 9 11-33** **4. Assessment Readiness Week 1 Warmup** **Additional Resources:** **1.** Reteach to Build 1.1 **2.** Additional Practice 1.1 **3.** Enrich 1.1	**1 day**
A1.A.CED.A.1 **A1.A.REI.A.1** **A1.A.REI.B.2.a**			**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 43 & 44** **3. Assigned Practice**	

	• **Explain that each step in solving a linear equation follows from the equality in the previous step.** • **Create and solve linear equations with one variable using the properties of equality.**	**1-2 Solving Linear Equations** **Pages 11-17**	**Selected Problems Pg 16 10-45** **4. Assessment Readiness Week 1 Warmup** **Additional Resources:** **1.** Reteach to Build 1.2 **2.** Additional Practice 1.2 **3.** Enrich 1.2	**1 day**
A.A.CED.A.1 **A1.A.REI.A.1** **A1.A.REI.2.a** **A1.N.Q.A.1.c**	• **Use the properties of equality to solve linear equations with a variable on both sides.** • **Identify whether linear equations have one solution, infinitely many solutions, or no solution.**	**1-3 Solving Equations with a Variable on both sides** **Pages 18-23**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 48 & 49** **3. Assigned Practice Selected Problems Pg 22 10-50** **4. Assessment Readiness Week 1 Warmup** **Additional Resources:** **1.** Reteach to Build 1.3 **2.** Additional Practice 1.3 **3.** Enrich 1.3	**2 days**
A1.A.CED.A.4	• **Rearrange formulas and equations to highlight a quantity of interest by isolating the variable using the same reasoning used to solve equations.** • **Use formulas and equations to solve problems.**	**1-4 Literal Equations and Formulas** **Pages 24-29**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 33 & 34** **3. Assigned Practice Selected Problems Pg 28 9-35** **4. Assessment Readiness Week 2 Warmup** **Additional Resources:** **1.** Reteach to Build 1.4 **2.** Additional Practice 1.4 **3.** Enrich 1.4	**2 days**

A1.A.CED.A.1 **A1.A.CED.A.3** **A1.A.REI.B.2.a**	• **Create and solve inequalities in one variable.** • **Interpret solutions to inequalities within the context.** • **Identify inequalities as true or false based on the number of solutions.**	**1-5 Solving Inequalities in One Variable** **Pages 30-36**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 48 &49** 3. **Assigned Practice Selected Problems Pg 34 10-44** 4. **Assessment Readiness Week 2 Warmup** 5. **Quiz over Topics 1.1 – 1.4** **Additional Resources:** **1.** Reteach to Build 1.5 **2.** Additional Practice 1.5 **3.** Enrich 1.5	**2 days**
A1.A.CED.A.1 **A1.A.CED.A.3** **A1.A.REI.B.2.a**	• **Create and solve a system of inequalities.** • **Interpret the solution to a compound inequality within a modeling context.**	**1-6 Compound Inequalities** **Pages 37-42**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 33 & 34** 3. **Assigned Practice Selected Problems Pg 41 10-29** 4. **Assessment Readiness Week 2 Warmup** **Additional Resources:** **1.** Reteach to Build 1.6 **2.** Additional Practice 1.6 **3.** Enrich 1.6	**1 day**
A1.A.CED.A.1 **A1.A.REI.B.2b**	• **Solve absolute value equations and inequalities.** • **Use absolute value equations and inequalities to solve problems.**	**1-7 Absolute Value Equations and Inequalities** **Pages 43-49**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 42 & 43** 3. **Assigned Practice Selected Problems Pg 48 11-33** 4. **Assessment Readiness Week 2 Warmup** 5. **Quiz over Topics 1.5 – 1.7** **Additional Resources:** **1.** Reteach to Build 1.7	**2 days**

			2. Additional Practice 1.7 **3.** Enrich 1.7	
Unit 1 Standards Above	**Unit 1 Learning Objectives Assessed Above**	**Review & Assessment Unit 1** **Page 50**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 1 Exam**	**2 days**
Unit 2 Linear Equations				
A1.F.LE.A.2 **A1.S.ID.C.5**	• **Write linear equations in two variable using slope-intercept form to represent the relationship between two quantities.** • **Interpret the slope and the inetpret the slope and the interpret of a linear model.**	**2.1 Slope Intercept Form** **Pages 57 -62**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 38 & 39** **3. Assigned Practice Selected Problems Pg 61 13-34** **4. Assessment Readiness Week 3 Warmup** **Additional Resources:** **1.** Reteach to Build 2.1 **2.** Additional Practice 2.1 **3.** Enrich 2.1	**2 days**
A1.F.LE.A.2 **A1.S.ID.C.5**	• **Write and graph linear equations in point-slope form.** • **Analyze different forms of a line to intpret the slope and y-intercept of a linear model in the context of data.**	**2.2 Point Slope Form** **Pages 63 - 68**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 39 & 40** **3. Assigned Practice Selected Problems Pg 67 11-35** **4. Assessment Readiness Week 3 Warmup** **5. Quiz over Topics 2.1 – 2.2** **Additional Resources:** **1.** Reteach to Build 2.2 **2.** Additional Practice 2.2 **3.** Enrich 2.2	**2 days**

A1.A.CED.A.2 **A1.A.CED.A.3**	• **Write and graph linear equations in standard form.** • **Use linear equations in standard form to interpret both the x- and yi intercepts in the context of given data.**	**2.3 Standard Form** **Pages 69 - 74**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 44 & 45** 3. **Assigned Practice Selected Problems Pg 73 10-40** 4. **Assessment Readiness Week 3 Warmup** **Additional Resources:** **1.** Reteach to Build 2.3 **2.** Additional Practice 2.3 **3.** Enrich 2.3	**2 days**
A1.A.CED.A.2	• **Create equations to represent lines are parallel or perpendicular to a given line.** • **Graph lines to show an understanding of the relationship between the slopes of parallel and perpendicular lines.** • **Solve real-world problems with parallel or perpendicular lines.**	**2.4 Parallel & Perpendicular Lines** **Pages 76 - 82**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 32 & 33** 3. **Assigned Practice Selected Problems Pg 81 10-29** 4. **Assessment Readiness Week 4 Warmup** **Additional Resources:** **1.** Reteach to Build 2.4 **2.** Additional Practice 2.4 **3.** Enrich 2.4	**1 day**
Unit 2 Standards Above	**Unit 2 Learning Objectives Assessed Above**	**Review & Assessment Unit 2** **Page 83**	1. **Informal Questioning and Discussion** 2. **Study Guide / Review Game** 3. **Unit 2 Exam**	**2 days**
Unit 3 Functions				
A1.F.IF.A.1	• **Understand that a relation is a function if each element of the domain is assigned to exactly one element in the range.**	**3.1 Relations and Functions** **Pages 89 - 94**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 27 & 28** 3. **Assigned Practice Selected Problems Pg 93 8-23**	**1 day**

	• **Determine a reasonable domain and identify constraints on the domain.**		4. **Assessment Readiness Week 4 Warmup** **Additional Resources:** **1.** Reteach to Build 3.1 **2.** Additional Practice 3.1	
A1.N.Q.A.1.b **A1.F.IF.A.1** **A1.F.IF.A.2.a** **A1.F.IF.A.2.b** **A1.F.IF.B.5** **A1.F.LE.A.2** **A1.F.LE.B.3**	• **Write and evaluate linear functions using function notation.** • **Graph a linear function and relate the domain of a function to its graph.** • **Interpret functions in terms of a context.**	**3.2 Linear Functions** **Pages 95 – 101**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 32 & 33** 3. **Assigned Practice Selected Problems Pg 100 9-28** 4. **Assessment Readiness Week 4 Warmup** **Additional Resources:** **1.** Reteach to Build 3.2 **2.** Additional Practice 3.2 **3.** Enrich 3.2	**2 days**
A1.F.IF.A.2.a	• **Use function notation to evaluate functions of two variables.** • **Define functions symbolically.**	**3.2 TN-1 Evaluating Two Variable Functions** **Page TN 1**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 43 & 44** 3. **LAB** 4. **Assessment Readiness Week 5 Warmup**	**1 day**
A1.F.IF.A.3	• **Write geometric formulas using function notation.**	**3.2 TN-1 Understanding Geometric Formulas as Functions** **Page TN 7**	1. **Informal Questioning and Discussion** 2. **LAB** 3. **Assessment Readiness Week 5 Warmup**	**1 day**
A1.F.IF.C.7 **A1.F.BF.A.1** **A1.F.BF.B.2**	• **Graph transformations of linear functions by identifying the effect of multiplying or adding specific values of k to the input or input.**	**3.3 Transforming Linear Functions** **Pages 102 - 108**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 34 & 35** 3. **Assigned Practice Selected Problems Pg 107 10-30**	**2 days**

	• **Interpret the key features of the graph of a transformation of linear function**		4. **Assessment Readiness Week 5 Warmup** **Additional Resources:** **1.** Reteach to Build 3.3 **2.** Additional Practice 3.3 **3.** Enrich 3.3	
A1.F.BF.A.1.a **A1.F.LE.A.1.b** **A1.F.LE.A.2**	• **Write arithmetic and geometric sequences both recursively and with an explicit formulas.** • **Use explicit formulas and recursive formulas to model real-world situations.**	**3.4 Arithmetic Sequences** **Pages 110 - 117**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 46 & 47** 3. **Assigned Practice Selected Problems Pg 116 10-42** 4. **Assessment Readiness Week 5 Warmup** 5. **Quiz over Topics 3.1 – 3.4** **Additional Resources:** **1.** Reteach to Build 3.4 **2.** Additional Practice 3.4 **3.** Enrich 3.4	**1 day**
A1.S.ID.B.4 **A1.S.ID.C.5**	• **Fit a function to linear data shown in a scatter plot and use fitted functions to solve problems in the context.** • **Interpret the slope of a trend line within the context of data.**	**3.5 Scatter Plots and Line of Best Fit** **Pages 118 -125**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 26 & 27** 3. **Assigned Practice Selected Problems Pg 124 9-20** 4. **Assessment Readiness Week 6 Warmup** **Additional Resources:** **1.** Reteach to Build 3.5	**1 day**
A1.S.ID.B.4 **A1.S.ID.C.6** **A1.S.ID.C.7**	• **Compute and interpret the correlation coefficient for linear data.** • **Plot and analyze residuals to assess the fit of a function.**	**3.6 Analyzing Lines of Fit** **Pages 126 -134**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 27 & 28** 3. **Assigned Practice Selected Problems Pg 133 8-23**	**1 day**

	• **Distinguish between correlation and causation.**		**4. Assessment Readiness Week 6 Warmup** **Additional Resources:** **1.** Reteach to Build 3.6 **2.** Additional Practice 3.6 **3.** Enrich 3.6	
Unit 3 Standards Above	**Unit 3 Learning Objectives Assessed Above**	**Review & Assessment Unit 3** **Page 135**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 3 Exam** **4. Assessment Readiness Week 6 Warmup**	**2 days**
Unit 4 Systems of Linear Equations and Inequalities				
A1.A.REI.C.4 **A1.A.REI.D.5**	• **Graph systems of linear equations in two variables to find an approximate solution.** • **Write a system of linear equations in two variables to represent real-world problems.**	**4.1 Solving Systems of Equations by Graphing** **Pages 143 -149**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 27 & 28** **3. Assigned Practice Selected Problems Pg 148 8-23** **4. Assessment Readiness Week 7 Warmup** **Additional Resources:** **1.** Reteach to Build 4.1 **2.** Additional Practice 4.1 **3.** Enrich 4.1	**2 days**
A1.A.CED.A.3 **A1.A.REI.C.4**	• **Use the substitution method to solve systems of equations.** • **Represent situations as a system of equations and interpret solutions as viable/ nonviable options for the situation.**	**4.2 Solving Systems of Equations by Substitution** **Pages 150 - 156**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 36 & 37** **3. Assigned Practice Selected Problems Pg 155 10-31** **4. Assessment Readiness Week 7 Warmup** **Additional Resources:** **1.** Reteach to Build 4.2	**2 days**

			2. Additional Practice 4.2 **3.** Enrich 4.2	
A1.A.CED.A.3 **A1.A.REI.C.4**	• **Solve systems of linear equations and prove that the sum of one equation and a multiple of the other produces a system with the same solutions as the original system.** • **Represent constraints with a system of equations in a modeling context.**	**4.3 Solving Systems of Equations by Elimination** **Pages 157 - 163**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 37 & 38** 3. **Assigned Practice Selected Problems Pg 162 10-31** 4. **Assessment Readiness Week 7 Warmup** 5. **Quiz over Topics 4.1 – 4.3** **Additional Resources:** **1.** Reteach to Build 4.3 **2.** Additional Practice 4.3 **3.** Enrich 4.3	**2 days**
A1.A.CED.A.3 **A1.A.REI.D.7**	• **Graph solutions to linear inequalities in two variables.** • **Represent constraints with inequalities and interpret solutions as viable or nonviable options in a modeling context.**	**4.4 Linear Inequalities in Two Variables** **Pages 164 -169**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 31 & 32** 3. **Assigned Practice Selected Problems Pg 168 10-27** 4. **Assessment Readiness Week 8 Warmup** **Additional Resources:** **1.** Reteach to Build 4.4 **2.** Additional Practice 4.4 **3.** Enrich 4.4	**1 day**
A1.A.CED.A.3 **A1.A.REI.D.7**	• **Graph the solution set of a system of linear inequalities in a modeling context.** • **Interpret solutions of linear inequalities in a modeling context.**	**4.5 Systems of Linear Inequalities** **Pages 170 - 176**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 36 & 37** 3. **Assigned Practice Selected Problems Pg 175 10-31** 4. **Assessment Readiness Week 8 Warmup** **Additional Resources:**	**1 day**

			1. Reteach to Build 4.5 **2.** Additional Practice 4.5 **3.** Enrich 4.5	
Unit 4 Standards Above	**Unit 4 Learning Objectives Assessed Above**	**Review & Assessment Unit 4** **Page 177**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 4 Exam** **4. Assessment Readiness Week 8 Warmup**	**2 days**

Quarter 2

Unit 5 Piecewise Functions

Standard(s)	Learning Objective(s)	Savvas Alignment	Assessments	Pacing
A1.F.IF.B.4 **A1.F.IF.B.6** **A1.F.IF.C.7** **A1.F.IF.C.9.b**	• **Graph an absolute value function and identify the key features of the graph.** • **Calculate and interpret the rate of change of an absolute value function over specified interval.**	**5.1 The Absolute Value Function** **Pages 183 - 189**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 34 & 35** **3. Assigned Practice Selected Problems Pg 188 10-30** **4. Assessment Readiness Week 9 Warmup** **Additional Resources:** **1.** Reteach to Build 5.1 **2.** Additional Practice 5.1 **3.** Enrich 5.1	**2 days**
A1.F.IF.B.5	• **Understand and graph piecewise defined functions.** • **Analyze the key features of the graph of a piecewise defined function.** • **Write and interpret a piecewise defined function to solve application problems.**	**5.2 The Piecewise Defined Functions** **Pages 191 - 196**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 29 & 30** **3. Assigned Practice Selected Problems Pg 195 10-25** **4. Assessment Readiness Week 9 Warmup** **Additional Resources:**	**2 days**

			1. Reteach to Build 5.2 **2.** Additional Practice 5.2 **3.** Enrich 5.2	
A1.F.IF.B.5	• **Graph step functions including ceiling and floor functions.** • **Calculate and interpret the average rate of change of step functions.**	**5.3 The Step Function** **Pages 197 - 202**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 30 & 31** **3. Assigned Practice Selected Problems Pg 201 10-26** **4. Assessment Readiness Week 10 Warmup** **5. Quiz over All Family Functions** **Additional Resources:** **1.** Reteach to Build 5.3 **2.** Additional Practice 5.3 **3.** Enrich 5.3	**2 days**
A1.F.IF.C.7 **A1.F.BF.B.2**	• **Graph transformations of piecewise defined functions.** • **Identify the effect of changing constants and coefficients of absolute value functions on their graphs.**	**5.4 Transformations of Piecewise Defined Functions** **Pages 203 - 209**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 35 & 37** **3. Assigned Practice Selected Problems Pg 208 10-31** **4. Assessment Readiness Week 10 Warmup** **Additional Resources:** **1.** Reteach to Build 5.4 **2.** Additional Practice 5.4 **3.** Enrich 5.4	**2 days**
Unit 5 Standards Above	**Unit 5 Learning Objectives Assessed Above**	**Review & Assessment Unit 5** **Page 210**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 5 Exam**	**2 days**

Unit 6 Exponents and Expoenential Functions				
A1.A.REI.A.1	• **Extend the properties of integer exponents to rational exponents to rewrite radical expressions using rational exponents.** • **Solve equations with rational exponents using the properties of exponents.**	**6.1 Rational Exponents and Properties of Exponents** **Pages 217 - 223**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 48 & 49** 3. **Assigned Practice Selected Problems Pg 222 19-44** 4. **Assessment Readiness Week 11 Warmup** **Additional Resources:** **1.** Reteach to Build 6.1 **2.** Additional Practice 6.1 **3.** Enrich 6.1	**2 days**
A1.N.Q.A.1.a **A1.F.IF.B.4** **A1.F.IF.B.5** **A1.F.IF.C.9.b** **A1.F.LE.A.1** **A1.F.LE.A.1.a**	• **Stretch graphs showing key features of exponential functions.** • **Write exponential functions using tables and graphs.** • **Compare linear and exponential functions.**	**6.2 Exponential Functions** **Pages 224 - 230**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 29 & 30** 3. **Assigned Practice Selected Problems Pg 229 9-25** 4. **Assessment Readiness Week 11 Warmup** **Additional Resources:** **1.** Reteach to Build 6.2 **2.** Additional Practice 6.2 **3.** Enrich 6.2	**2 days**
A1.A.SSE.A.1. **A1.A.SSE.A.1.b** **A1.A.CED.A.2** **A1.A.REI.D.6** **A1.F.IF.B.6** **A1.F.LE.A.1.c** **A1.F.LE.A.2** **A1.F.LE.B.3** **A1.N.Q.A.1.d** **A1.F.IF.C.9.b**	• **Construct exponential growth and decay functions given a description of a relationship.** • **Recognize if a situation can be modeled with exponential growth or exponential decay and interpret the parameters of the model in context.**	**6.3 Exponential Growth and Decay** **Pages 231 - 238**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 30 & 31** 3. **Assigned Practice Selected Problems Pg 237 10-26** 4. **Assessment Readiness Week 11 Warmup** 5. **Quiz over Topics 6.1 – 6.3** **Additional Resources:** **1.** Reteach to Build 6.3	**2 days**

			2. Additional Practice 6.3 **3.** Enrich 6.3	
A1.F.BF.A.1.a **A1.F.LE.A.2**	• **Find explicit and recursive formulas for geometric sequences.** • **Translate between recursive and explicit formulas for geometric sequences.** • **Construct exponential functions to represent geometric sequences.**	**6.4 Geometric Sequence** **Pages 239 - 245**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 44 & 45** 3. **Assigned Practice Selected Problems Pg 244 11-40** 4. **Assessment Readiness Week 12 Warmup** **Additional Resources:** **1.** Reteach to Build 6.4 **2.** Additional Practice 6.4 **3.** Enrich 6.4	**2 days**
A1.F.IF.B.4 **A1.** **F.IF.C.9.a**	• **Translate the graph of an exponential function vertically and horizontally, identifying the effect different values of h and k have on the graph of the function.** • **Compare characteristics of two exponential functions represented in different ways, like tables and graphs.**	**6.5 Transformations of Exponential Functions** **Pages 246 251**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 33 & 34** 3. **Assigned Practice Selected Problems Pg 250 15-28** 4. **Assessment Readiness Week 12 Warmup** **Additional Resources:** **1.** Reteach to Build 6.5 **2.** Additional Practice 6.5 **3.** Enrich 6.5	**2 days**
Unit 6 Standards Above	**Unit 6 Learning Objectives Assessed Above**	**Review & Assessment Unit 6 Page 253**	1. **Informal Questioning and Discussion** 2. **Study Guide / Review Game** 3. **Unit 6 Exam** 4. **Assessment Readiness Week 12 Warmup**	**2 days**
Unit 7 Polynomials and Factoring				
A1.A.APR.A.1			1. **Informal Questioning and Discussion**	

	• **Identify the parts of a polynomial.** • **Classify polynomials by number of terms and degree.** • **Write a polynomial in standard form.** • **Add or subtract two polynomials.**	**7.1 Adding and Subtracting Polynomials** **Pages 259 - 266**	2. **Exit Ticket Assessment Practice 43 & 44** 3. **Assigned Practice Selected Problems Pg 265 13 - 38** 4. **Assessment Readiness Week 13 Warmup** **Additional Resources:** **1.** Reteach to Build 7.1 **2.** Additional Practice 7.1 **3.** Enrich 7.1	**2 days**
A1.A.APR.A.1	• **Use the distributive property with polynomials, recognizing that polynomials are closed under multiplication.** • **Multiply polynomials using a table and an area model.**	**7.2 Multiplying Polynomials** **Pages 267 - 274**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 38 & 39** 3. **Assigned Practice Selected Problems Pg 273 11-33** 4. **Assessment Readiness Week 13 Warmup** **Additional Resources:** **1.** Reteach to Build 7.2 **2.** Additional Practice 7.2 **3.** Enrich 7.2	**2 days**
A1.A.APR.A.1	• **Determine the square of a binomial.** • **Find the product of a sum and difference of two squares.** • **Solve real-world problems involving the square of a binomial.**	**7.3 Multiplying Special Cases** **Pages 275 280**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 41 & 42** 3. **Assigned Practice Selected Problems Pg 279 11-37** 4. **Assessment Readiness Week 13 Warmup** 5. **Quiz over Topics 7.1 – 7.3** **Additional Resources:** **1.** Reteach to Build 7.3 **2.** Additional Practice 7.3 **3.** Enrich 7.3	**2 days**

A1.A.SSE.A.1.a	• **Find the GCF of the terms of a polynomial.** • **Use the structure of a polynomial to rewrite it in factored form.** • **Factor polynomials that represent real-world problems.**	**7.4 Factoring Polynomials** **Pages 281 - 286**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 41 & 42** 3. **Assigned Practice Selected Problems Pg 285 18-37** 4. **Assessment Readiness Week 14 Warmup** **Additional Resources:** **1.** Reteach to Build 7.4 **2.** Additional Practice 7.4 **3.** Enrich 7.4	**2 days**
A1.A.SSE.A.1.a	• **Factor a trinomial in standard form by finding two binomials factors whose product is equal to the trinomial.** • **Identify and use patterns in the signs of the coefficients of the terms of a trinomial expression.**	**7.5 Factoring with leading coefficient equals 1** **Pages 287 - 293**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 39 & 40** 3. **Assigned Practice Selected Problems Pg 292 10-35** 4. **Assessment Readiness Week 14 Warmup** **Additional Resources:** **1.** Reteach to Build 7.5 **2.** Additional Practice 7.5 **3.** Enrich 7.5	**2 days**
A1.A.SSE.A.1.a	• **Identify the common factor of the coefficients in the terms of a trinomial expression when a not 1.** • **Write a quadratic trinomial as a product of two binomial factors.**	**7.6 Factoring with leading coefficient not equal 1** **Pages 295 - 300**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 52 & 53** 3. **Assigned Practice Selected Problems Pg 299 14 -48** 4. **Assessment Readiness Week 14 Warmup** **Additional Resources:** **1.** Reteach to Build 7.6 **2.** Additional Practice 7.6 **3.** Enrich 7.6	**2 days**

A1.A.SSE.A.1.a	• **Identify and factor a trinomial that is a perfect square or a binomial that is a difference of squares.** • **Factor special cases of polynomials within the context of real-world problems.**	**7.7 Factoring Special Cases** **Pages 301 - 306**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 52 & 53** 3. **Assigned Practice Selected Problems Pg 305 17-48** 4. **Assessment Readiness Week 15 Warmup** 5. **Quiz over Topics 7.4 – 7.7** **Additional Resources:** **1.** Reteach to Build 7.7 **2.** Additional Practice 7.7 **3.** Enrich 7.7	**2 days**
Unit 7 Standards Above	**Unit 7 Learning Objectives Assessed Above**	**Review & Assessment Unit 7** **Page 307**	1. **Informal Questioning and Discussion** 2. **Study Guide / Review Game** 3. **Unit 7 Exam** 4. **Assessment Readiness Week 15 Warmup**	**2 days**
Semester 1 Exam Review and Test				**5 days**

Quarter 3

Unit 8 Quadratics Functions

Standard(s)	Learning Objective(s)	Savvas Alignment	Assessments	Pacing
A1.A.CED.A.2 **A1.F.IF.B.6** **A1.F.IF.C.7** **A1.F.BF.B.2**	• **Identify key features of the graph of a quadratic function using graphs, tables, and equations.**	**8.1 Key Features of Graphs of Quadratic Functions** **Pages 315 - 321**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 29 & 30** 3. **Assigned Practice Selected Problems Pg 320 10-25** 4. **Assessment Readiness Week 16 Warmup**	**2 days**
A1.F.IF.C.9.b	• **Explain the effect of the value of a on the quadratic parent function.**		**Additional Resources:**	

			1. Reteach to Build 8.1 **2.** Additional Practice 8.1 **3.** Enrich 8.1	
A1.F.IF.C.7 **A1.F.BF.B.2** **A1.F.IF.C.9.b**	• **Identify the key features of the graph of quadratic functions written in vertex form.** • **Graph quadratic functions in vertex form.**	**8.2 Quadratic Functions in Vertex Form** **Pages 322 - 328**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 42 & 43** 3. **Assigned Practice Selected Problems Pg 320 10-25** 4. **Assessment Readiness Week 16 Warmup** **Additional Resources:** **1.** Reteach to Build 8.2 **2.** Additional Practice 8.2 **3.** Enrich 8.2	**2 days**
A1.F.IF.B.4 **A1.F.IF.C.** **A1.F.IF.C.8.a** **A1.F.IF.C.9.a** **A1.F.IF.C.9.b**	• **Graph quadratic functions in standard form and show intercepts, maxima and minima.** • **Determine how the values of a,b, and c affect the graph of standard form.** • **Identify key features of parabolas.** • **Compare properties of quadratic functions presented in different forms(algebraically, in tables, and graphically).**	**8.3 Quadratic Functions in Standard Form** **Pages 329 - 335**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 40 & 41** 3. **Assigned Practice Selected Problems Pg 334 10-36** 4. **Assessment Readiness Week 16 Warmup** 5. **Quiz over Topics 8.1 – 8.3** **Additional Resources:** **1.** Reteach to Build 8.3 **2.** Additional Practice 8.3 **3.** Enrich 8.3	**2 days**
A1.F.IF.A.2.a **A1.F.BF.A.1** **A1.S.ID.B.4**	• **Use quadratic functions fitted to data to model real-world situations.** • **Use the vertical motion model to write an equation.** • **Compare a model to a data set by analyzing and evaluating residuals.**	**8.4 Modeling with Quadratic Functions** **Pages 336 - 342**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 27 & 28** 3. **Assigned Practice Selected Problems Pg 341 9-23** 4. **Assessment Readiness Week 17 Warmup**	**2 days**

			Additional Resources: **1.** Reteach to Build 8.4 **2.** Additional Practice 8.4 **3.** Enrich 8.4	
A1.F.LE.A.1.a **A1.S.ID.B.4**	• **Determine which model (linear, exponential, or quadratic) best fits a set of data.** • **Use fitted functions to solve problems in the context of data.**	**8.5 Comparing Linear, Exponential, and Quadratic Models** **Pages 344 - 350**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 21 & 22** **3. Assigned Practice Selected Problems Pg 349 7-17** **4. Assessment Readiness Week 17 Warmup** **Additional Resources:** **1.** Reteach to Build 8.5 **2.** Additional Practice 8.5 **3.** Enrich 8.5	**2 days**
Unit 8 Standards Above	**Unit 8 Learning Objectives Assessed Above**	**Review & Assessment Unit 8** **Page 350**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 8 Exam** **4. Assessment Readiness Week 17 Warmup**	**2 days**
Unit 9 Solving Quadratic Equations				
A1.A.REI.B.3	• **Use a graph to identify the x-intercepts as solutions of a quadratic.** • **Use a graphing calculator to make a table of values to approximate or solve a quadratic equation.**	**9.1 Solving Quadratic Equations Using Graphs and Tables** **Pages 357 - 362**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 37 & 38** **3. Assigned Practice Selected Problems Pg 361 12 -33** **4. Assessment Readiness Week 18 Warmup** **Additional Resources:** **1.** Reteach to Build 9.1 **2.** Additional Practice 9.1 **3.** Enrich 9.1	**2 days**

A1.A.REI.B.3 **A1.F.IF.C.8.a**	• **Use the zero-product property and factoring to find the solution of a quadratic equation.** • **Apply factoring to solve real-world problems.** • **Use the zeros of a quadratic equation to sketch a graph.** • **Write the factored form of a quadratic function form a graph.**	**9.2 Solving Quadratic Equations by Factoring** **Pages 363 - 369**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 37 & 38** 3. **Assigned Practice Selected Problems Pg 15 - 38** 4. **Assessment Readiness Week 18 Warmup** **Additional Resources:** **1.** Reteach to Build 9.2 **2.** Additional Practice 9.2 **3.** Enrich 9.2	**2 days**
A1.A.SSE.A.1.a **A1.A.SSE.A.1.b**	• **Use properties of exponents to rewrite radical expressions.** • **Multiply radical expressions.** • **Write a radical expression to model or represent a real-world problem.**	**9.3 Rewriting Radical Expressions** **Pages 370 - 375**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 51 & 52** 3. **Assigned Practice Selected Problems Pg** 4. **Assessment Readiness Week 18 Warmup** **Additional Resources:** **1.** Reteach to Build 9.3 **2.** Additional Practice 9.3 **3.** Enrich 9.3	**2 days**
A1.A.CED.A.1 **A1.A.REI.B.3.a**	• **Solve quadratic equations by finding square roots.** • **Determine reasonable solutions or real-world problems.**	**9.4 Solving Quadratic Equations Using Square Roots** **Pages 376 - 381**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 50 & 51** 3. **Assigned Practice Selected Problems Pg 380 18-46** 4. **Assessment Readiness Week 19 Warmup** 5. **Quiz over Topics 9.1 – 9.4** **Additional Resources:** **1.** Reteach to Build 9.4 **2.** Additional Practice 9.4 **3.** Enrich 9.4	**2 days**

A1.A.REI.B.3.a **A1.F.IF.C.8.a**	• **Solve a quadratic trinomial by completing the square.** • **Use completing the square to write a quadratic in vertex form.**	**9.5 Completing the Square** **Pages 382 - 388**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 49 & 50** 3. **Assigned Practice Selected Problems Pg 387 15-45** 4. **Assessment Readiness Week 19 Warmup** **Additional Resources:** **1.** Reteach to Build 9.5 **2.** Additional Practice 9.5 **3.** Enrich 9.5	**2 days**
A1.A.CED.A.1 **A1.A.REI.B.3.a**	• **Derive the quadratic formula.** • **Solve quadratic equations in one variable by using the quadratic formula.** • **Use the discriminate to determine the number and type of solutions to a quadratic equation.**	**9.6 The Quadratic Formula and Discriminant** **Pages 389 - 395**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 42 & 43** 3. **Assigned Practice Selected Problems Pg 394 14-38** 4. **Assessment Readiness Week 19 Warmup** 5. **Quiz over Topics 9.5 – 9.6** **Additional Resources:** **1.** Reteach to Build 9.6 **2.** Additional Practice 9.6 **3.** Enrich 9.6	**2 days**
A1.A.REI.B.3.a **A1.A.REI.D.6**	• **Describe a linear-quadratic system of equations.** • **Solve a linear-quadratic system of equations.**	**9.7 Solving Systems of Linear and Quadratic Equations** **Pages 397 - 402**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 36 & 37** 3. **Assigned Practice Selected Problems Pg 401 12 -32** 4. **Assessment Readiness Week 20 Warmup** **Additional Resources:**	**2 days**

			1. Reteach to Build 9.7 **2.** Additional Practice 9.7 **3.** Enrich 9.7	
Unit 9 Standards Above	**Unit 9 Learning Objectives Assessed Above**	**Review & Assessment Unit 9** **Page 403**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 9 Exam** **4. Assessment Readiness Week 20 Warmup**	**2 days**
Unit 10 Working with Functions				
A1.F.IF.B.4	• **Graph translations of the square root function.** • **Calculate and interpret the average rate of change for a square root function over specified interval.**	**10.1 The Square Root Function** **Pages 411 - 417**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 40 & 41** **3. Assigned Practice Selected Problems Pg 417 12 – 36** **4. Assessment Readiness Week 21 Warmup** **Additional Resources:** **1.** Reteach to Build 10.1 **2.** Additional Practice 10.1 **3.** Enrich 10.1	**1.5 days**
A1.F.IF.B.4	• **Identify key features of the graph of cube root functions and graph translations of them.** • **Model real-world situations using cube root functions.** • **Calculate and interpret the average rate of change of a cube root function over specified interval.**	**10.2 The Cube Root Function** **Pages 418 - 424**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 38 & 39** **3. Assigned Practice Selected Problems Pg 423 9-43** **4. Assessment Readiness Week 21 Warmup** **Additional Resources:** **1.** Reteach to Build 10.2 **2.** Additional Practice 10.2 **3.** Enrich 10.2	**1.5 days**

A1.F.IF.B.4	• **Relate the domain and range of a function to its graph.** • **Analyze the key features of the graph of a function to identify the type of function it represents.**	**10.3 Analyzing Functions Graphically** **Pages 425 - 431**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 34 & 35** 3. **Assigned Practice Selected Problems Pg 430 7-30** 4. **Assessment Readiness Week 22 Warmup** **Additional Resources:** **1.** Reteach to Build 10.3 **2.** Additional Practice 10.3 **3.** Enrich 10.3	**2 days**
A1.F.BF.B.2 **A1.F.IF.C.7**	• **Graph translations of absolute value, exponential, quadratic, and radical functions.** • **Determine how combining translations affect the key features of the graph of a function.**	**10.4 Translations of Function** **Pages 432 - 437**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 33 & 34** 3. **Assigned Practice Selected Problems Pg 436 12-30** 4. **Assessment Readiness Week 22 Warmup** **Additional Resources:** **1.** Reteach to Build 10.4 **2.** Additional Practice 10.4 **3.** Enrich 10.4	**2 days**
A1.F.BF.B.2 **A1.F.IF.C.7**	• **Identify the effect on the graph of a function of multiplying the output by -1.** • **Identify the effect on the graph of a function of replacing f(x) by kf(x) or fk(x) for specific values of k.**	**10.5 Compressions and Stretches of Functions** **Pages 438 - 443**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 33 & 34** 1. **Assigned Practice Selected Problems Pg 442 10-29** 2. **Assessment Readiness Week 23 Warmup** **Additional Resources:** **1.** Reteach to Build 10.5 **2.** Additional Practice 10.5 **3.** Enrich 10.5	**1 day**

A1.F.BF.A.1	• **Combine functions using arithmetic operations, including addition, subtraction, and multiplication.** • **Combine functions to solve real-world problems.**	**10.6 Operations with Functions** **Pages 445 - 450**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 30 & 31** 3. **Assigned Practice Selected Problems Pg 449 11-26** 4. **Assessment Readiness Week 23 Warmup** **Additional Resources:** **1.** Reteach to Build 10.6 **2.** Additional Practice 10.6 **3.** Enrich 10.6	**1 day**
Extends A1.F.BF.A.1	• **Write an equation for the inverse of a linear function.** • **Write the inverse of a quadratic function after restricting the domain so the original function is one-to-one.**	**10.7 Inverse Functions** **Pages 451 - 456**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 33 & 34** 3. **Assigned Practice Selected Problems Pg 455 9-29** 4. **Assessment Readiness Week 23 Warmup** **Additional Resources:** **1.** Reteach to Build 10.7 **2.** Additional Practice 10.7 **3.** Enrich 10.7	**1 day**
Unit 10 Standards Above	**Unit 10 Learning Objectives Assessed Above**	**Review & Assessment Unit 10** **Page 457**	1. **Informal Questioning and Discussion** 2. **Study Guide / Review Game** **Unit 10 Exam**	**2 days**
Unit 11 Statistics				
A1.S.ID.A.1	• **Represent data using dot plots, box plots and histograms.**	**11.1 Analyzing Data Displays**	1. **Informal Questioning and Discussion** 2. **Exit Ticket Assessment Practice 27 & 28** 3. **Assigned Practice Selected Problems Pg 470 12-23**	**1 day**

A1.S.ID.A.3	• **Interpret the data displayed in dot plots, box plots, and histograms within the context of the data that it represents.**	**Pages 465 - 471**	**4. Assessment Readiness Week 24 Warmup** **Additional Resources:** **1.** Reteach to Build 11.1 **2.** Additional Practice 11.1 **3.** Enrich 11.1	
A1.S.ID.A.1 **A1.S.ID.A.2** **A1.S.ID.A.3**	• **Use measures of center to interpret and compare data sets displayed in dot plots, box plots, and histograms.** • **Explain and account for the effect of outliers on measures of center and variability.** • **Use measures of variability such as MAD and IQR to interpret and compare data sets.**	**11.2 Comparing Data Sets** **Pages 472 - 479**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 22 & 23** **3. Assigned Practice Selected Problems Pg 478 10-18** **4. Assessment Readiness Week 24 Warmup** **Additional Resources:** **1.** Reteach to Build 11.2 **2.** Additional Practice 11.2 **3.** Enrich 11.2	**1 day**
A1.S.ID.A.1 **A1.S.ID.A.2** **A1.S.ID.A.3**	• **Interpret and compare differences in the shape, center, and spread of data of different data sets.** • **Determine the relationship between the mean and median of a data set when the shape of the data is evenly spread, skewed right or skewed left.**	**11.3 Interpreting the Shapes of Data Displays** **Pages 480 - 486**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 20 & 21** **3. Assigned Practice Selected Problems Pg 485 9-18** **4. Assessment Readiness Week 24 Warmup** **5. Quiz over Topics 11.1 – 11.3** **Additional Resources:** **1.** Reteach to Build 11.3 **2.** Additional Practice 11.3 **3.** Enrich 11.3	**2 days**
Quarter 4				
Unit 11 Statistics Continued				

Standard(s)	Learning Objective(s)	Savvas Alignment	Assessments	Pacing
A1.S.ID.A.2 **A1.S.ID.A.3**	• **Interpret differences in the variability or spread in the context of a data set.** • **Calculate the standard deviation of a data set and use it to compare and interpret sets.**	**11.4 Standard Deviation** **Pages 487 - 494**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 22 & 23** **3. Assigned Practice Selected Problems Pg 493 9-18** **4. Assessment Readiness Week 25 Warmup** **Additional Resources:** **1.** Reteach to Build 11.4 **2.** Additional Practice 11.4 **3.** Enrich 11.4	**1 day**
A1.S.ID.A.2 **A1.S.ID.A.3**	• **Organize and summarize categorical data by creating two-way frequency tables.** • **Calculate and interpret joint and marginal frequencies, joint, and marginal relative frequencies, and conditional relative frequencies, and use them to make inferences about a population.**	**11.5 Two-Way Frequency Tables** **Pages 495 - 500**	**1. Informal Questioning and Discussion** **2. Exit Ticket Assessment Practice 27 & 28** **3. Assigned Practice Selected Problems Pg 499 9-23** **4. Assessment Readiness Week 25 Warmup** **Additional Resources:** **1.** Reteach to Build 11.5 **2.** Additional Practice 11.5 **3.** Enrich 11.5	**1 day**
Unit 11 Standards Above	**Unit 11 Learning Objectives Assessed Above**	**Review & Assessment Unit 11 Page 502**	**1. Informal Questioning and Discussion** **2. Study Guide / Review Game** **3. Unit 11 Exam** **Assessment Readiness Week 15 Warmup**	**2 days**
Review for EOC				
TN Ready Standards for Algebra I		**EOC Review Resources for Savvas**	**1. Informal Questioning and Discussion**	

	Major Focus Standards of TN Ready	1. **Tennessee Standards Practice Workbook.** 2. **Envision Student Companion** 3. **Envision Assessment Readiness Workbook** **Additional Resources** 4. **TnReady Review** 5. **Practice Test** 6. **Samplers** 7. **AAPowerschool** 8. **EOC Review Handouts** 9. **Discussions**	2. **Assessment Readiness Week 26 -28 Warmup** 3. **Tennessee Standards Practice** 4. **Envision Assessment Practice Test A-C**	**13 days**
Testing Window EOCs TESTING TN Ready Standards for Algebra I	**Major Focus Standards of TN Ready**	**End of Course Assessments**	**State Assessments and Review Days** 1. **Envision Student Companion Pages**	**10 days**
Unit Geometry Intro				
A1.A.SSE.A.1.a **A1.A.SSE.A.1.b**	• **Simplify expression involving radicals**	**Topic Simplifying Radicals**	1. **Informal Questioning and Discussion** 2. **Assigned Practice Handout** 3. **Assessment Readiness Week 29 Warmup**	**3 days**
G.CO.C.8	• **Calculate the distance between two points.** • **Find the missing coordinate of a point given the distance from another point.**	**Topic Distance Formula**	1. **Informal Questioning and Discussion** 2. **Assigned Practice Handout** 3. **Assessment Readiness Week 29 Warmup**	**2 days**
G.CO.C.9 **G.SRT.C.8a**	• **Determine the missing side length of a right triangle.** • **Understand the relationship between legs and hypotenuse of right triangles.**	**Topic Pythagorean Theorem**	1. **Informal Questioning and Discussion** 2. **Assigned Practice Handout**	**2 days**

	• **Determine if given measures create a Pythagorean Triple.**		3. **Assessment Readiness Week 30 Warmup**	
G.CO.C.8	• **Find the midpoint of a line segment.**	**Topic Midpoint**	1. **Informal Questioning and Discussion** 2. **Assigned Practice Handout** 3. **Assessment Readiness Week 30 Warmup**	**2 days**
Unit Geometry Standards Above	**Unit Geometry Learning Objectives Assessed Above**	**Review & Assessment Unit Geometry Concepts**	1. **Informal Questioning and Discussion** 2. **Study Guide / Review Game** 3. **Unit Geometry Exam**	**2 days**
Review and Final Exams				**5 days**