Mathematics
Algebra I: Year at a Glance
2018 - 2019

Q1		Q2		Q3		Q4	
Module 1 **Aug. 6 – Oct. 5**		**Module 3** **Oct. 15 - Dec. 19**		**Module 4** **Jan. 7 – Mar. 8**		**Modules 2 and 5** **Mar. 18 – May 24** **TN Ready Testing**	
Module 1 **Relationships Between Quantities and Reasoning with Equations and Their Graphs**		**Module 3** **Linear and Exponential Functions**		**Module 4** **Polynomials and Quadratic Expressions, Equations, and Functions**		**Modules 2** **Descriptive Statistics** **Module 5** **A Synthesis of Modeling with Equations and Functions**	
A1. N.Q.A.1	A1.A.REI. C.4*	A1. A. SSE. B.3	A1. F.IF.C.8*	A1. A. SSE. A.1	A1. F.IF.C.6*	A1. N.Q.A.2	A1. S.ID.A.1
A1. N.Q.A.2	A1.A.REI. D.5*	A1. A. SSE. B.3c*	A1. F.BF.A.1	A1. A. SSE. A.2	A1. F.IF.C.7*	A1. N.Q.A.3	A1. S.ID.A.2
A1. N.Q.A.3	A1.A.REI. D.7*	A1. A. CED.A.1	A1. F.BF.A.1a	A1. A. SSE. B.3	A1. F.IF.C.8*	A1. A. CED.A.1	A1. S.ID.A.3
A1. A. APR.A.1		A1.A.REI. D.6*	A1. F.BF.B.2*	A1. A. APR.A.1	A1. F.BF.B.2	A1. A. CED.A.2	A1. S.ID.B.4
A1. A. CED.A.1		A1. F.IF.A.1	A1. F.LE.A.1a	A1. A. APR.B.2*		A1. F.IF.B.3*	A1. S.ID.B.4a
A1. A. CED.A.2		A1. F.IF.A.2	A1. F.LE.A.2	A1. A. REI.B.3*		A1. F.IF.B.4*	A1. S.ID.B.4b*
A1. A. CED.A.3		A1. F.IF.B.3*	A1. F.LE.A.3	A1. A. CED.A.1		A1. F.IF.B.5*	A1. S.ID.C.5
A1. A. CED.A.4		A1. F.IF.B.4*	A1. F.LE.B.4*	A1. A. CED.A.2		A1. F.BF.A.1	A1. S.ID.C.6
A1. A. SSE. A.1		A1. F.IF.B.5*		A1.A.REI. D.6*		A1. F.LE.A.1	A1. S.ID.C.7
A1. A. SSE. A.2		A1. F.IF.B.6*		A1. F.IF.B.3*		A1. F.LE.A.1b	
A1. A. REI.A.1		A1. F.IF.C.6a*		A1. F.IF.B.4*		A1. F.LE.A.1c	
A1.A.REI.B. 2*		A1. F.IF.C.6b*		A1. F.IF.B.5*		A1. F.LE.A.2	

Key: **Major Content** | **Supporting Content**

*** (asterisk) Indicates a standard with differences between the TN State Standards' numbering and/or verbiage and the standards in Eureka**

Note: Please use this suggested pacing as a guide. It is understood that teachers may be up to 1 week ahead or 1 week behind depending on the needs of their students.

Use the instructional map and Digital Suite resources as you prepare to teach a module for additional guidance in planning, pacing, and suggestions for omissions.

Introduction

Destination 2025, Shelby County Schools' 10-year strategic plan, is designed not only to improve the quality of public education, but also to create a more knowledgeable, productive workforce and ultimately benefit our entire community.

What will success look like?

In order to achieve these ambitious goals, we must collectively work to provide our students with high quality, college and career ready aligned instruction. The Tennessee State Standards provide a common set of expectations for what students will know and be able to do at the end of a grade. The State of Tennessee provides two sets of standards, which include the Standards for Mathematical Content and The Standards for Mathematical Practice. The Content Standards set high expectations for all students to ensure that Tennessee graduates are prepared to meet the rigorous demands of mathematical understanding for college and career. The eight Standards for Mathematical Practice describe the varieties of expertise, habits of mind, and productive dispositions that educators seek to develop in all students. The Tennessee State Standards also represent three fundamental shifts in mathematics instruction: **focus, coherence and rigor**.

Curriculum and Instruction – Mathematics

Quarter 2 Algebra I

The **Standards for Mathematical Practice** describe varieties of expertise, habits of minds and productive dispositions that mathematics educators at all levels should seek to develop in their students. These practices rest on important National Council of Teachers of Mathematics (NCTM) "processes and proficiencies" with longstanding importance in mathematics education. Throughout the year, students should continue to develop proficiency with the eight Standards for Mathematical Practice. The following are the eight Standards for Mathematical Practice:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of them.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

This curriculum map is designed to help teachers make effective decisions about what mathematical content to teach so that ultimately our students can reach Destination 2025. Throughout this curriculum map, you will see resources as well as links to tasks that will support you in ensuring that students are able to reach the demands of the standards in your classroom. In addition to the resources embedded in the map, there are some high-leverage resources around the content standards and mathematical practice standards that teachers should consistently access. For a full description of each, click on the links below.

- Tennessee Mathematics Content Standards
- Standards for Mathematical Practice
- Literacy Skills for Mathematical Proficency

Structure of the Standards

Structure of the TN State Standards include:

- **Content Standards** - Statements of what a student should know, understand, and be able to do.
- **Clusters** - Groups of related standards. Cluster headings may be considered as the big idea(s) that the group of standards they represent are addressing. They are therefore useful as a quick summary of the progression of ideas that the standards in a domain are covering and can help teachers to determine the focus of the standards they are teaching.
- **Domains** - A large category of mathematics that the clusters and their respective content standards delineate and address. For example, Number and Operations – Fractions is a domain under which there are a number of clusters (the big ideas that will be addressed) along with their respective content standards, which give the specifics of what the student should know, understand, and be able to do when working with fractions.
- **Conceptual Categories** – The content standards, clusters, and domains in the 9th-12th grades are further organized under conceptual categories. These are very broad categories of mathematical thought and lend themselves to the organization of high school course work. For example, Algebra is a conceptual category in the high school standards under which are domains such as Seeing Structure in Expressions, Creating Equations, Arithmetic with Polynomials and Rational Expressions, etc.

How to Use the Maps

Overview
An overview is provided for each quarter and includes the topics, focus standards, intended rigor of the standards and foundational skills needed for success of those standards.

Your curriculum map contains four columns that each highlight specific instructional components. Use the details below as a guide for information included in each column.

Tennessee State Standards
TN State Standards are located in the left column. Each content standard is identified as Major Content or Supporting Content. A key can be found at the bottom of the map.

Content
This section contains learning objectives based upon the TN State Standards. Best practices tell us that clearly communicating measurable objectives lead to greater student understanding. Additionally, essential questions are provided to guide student exploration and inquiry.

Instructional Support
District and web-based resources have been provided in the Instructional Support column. You will find a variety of instructional resources that align with the content standards. The additional resources provided should be used as needed for content support and scaffolding.

Vocabulary and Fluency
The inclusion of vocabulary serves as a resource for teacher planning and for building a common language across K-12 mathematics. One of the goals for Tennessee State Standards is to create a common language, and the expectation is that teachers will embed this language throughout their daily lessons. In order to aid your planning, we have also included a list of fluency activities for each lesson. It is expected that fluency practice will be a part of your daily instruction. (Note: Fluency practice is not intended to be speed drills, but rather an intentional sequence to support student automaticity. Conceptual understanding must underpin the work of fluency.

Instructional Calendar
As a support to teachers and leaders, an instructional calendar is provided ***as a guide***. Teachers should use this calendar for effective planning and pacing, and leaders should use this calendar to provide *support* for teachers. Due to variances in class schedules and differentiated support that may be needed for students' adjustment to the calendar may be required.

Topics Addressed in Quarter

Topic A: Linear and Exponential Sequences
Topic B: Functions and Their Graphs
Topic C: Transformations of Functions
Topic D: Using Functions and Graphs to Solve Problems

Time Frame: October 15 – December 19, 2018

Overview

In earlier grades, students define, evaluate, and compare functions and use them to model relationships between quantities. In quarter two, students extend their study of functions to include function notation and the concepts of domain and range. They explore many examples of functions and their graphs, focusing on the contrast between linear and exponential functions. They interpret functions given graphically, numerically, symbolically, and verbally; translate between representations; and understand the limitations of various representations.

Grade Level Standard	Type of Rigor	Foundational Standards
A1. A. SSE. B.3	Conceptual Understanding & Procedural Fluency	7.EE.A.1
A1. A. SSE. B.3c*	Conceptual Understanding & Procedural Fluency	8.EE.A.1
A1. A. CED.A.1	Conceptual Understanding, Procedural Fluency & Application	8.EE.C.7
A1.A.REI. D.6*	Conceptual Understanding & Procedural Fluency	8.EE.C.8
A1. F.IF.A.1	Conceptual Understanding	8.F.A.1,2,3
A1. F.IF.A.2	Conceptual Understanding & Application	6.EE.A.2c
A1. F.IF.B.3*	Conceptual Understanding	8.F.B.5
A1. F.IF.B.4*	Conceptual Understanding	8.F
A1. F.IF.B.5*	Conceptual Understanding & Procedural Fluency	8.F.B.4

Curriculum and Instruction – Mathematics

Quarter 2 **Algebra I**

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY

Module 3 Linear and Exponential Functions

Algebra I Pacing and Preparation Guide

Allow approximately 2.5 weeks for instruction, review and assessment of Topic A
Allow approximately 3 weeks for instruction, review and assessment of Topic B
Mid-Module 3 Assessment Window – November 14 - 16
Allow 2 weeks for instruction, review and assessment of Topic C
Allow approximately 1.5 weeks for instruction, review and assessment of Topic D
End-of-Module 3 Assessment Window – December 12- 14

Domain: Interpreting Functions
Cluster: Understand the concept of a function and use function notation.

- **A1. F.IF.A.1** Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f*(*x*) denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y* = *f*(*x*).

- **A1. F.IF.A.2** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

Domain: Interpreting Functions
Cluster: Interpret functions that arise in applications in terms of the context.

- **A1. F.IF.B.5 (formerly F.IF.B.6)** Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. ★

Domain: Building Functions

Essential Questions:

- What are the characteristics of exponential functions?
- What are real world models of exponential growth and decay?
- How can one differentiate an exponential model from a linear model given a real world set of data?
- How do I use different representations to analyze linear and exponential functions?
- How do I build a linear or exponential function that models a relationship between two quantities?
- Why is the concept of a function important and how do I use function notation to show a variety of situations modeled by functions?
- How do I interpret functions that arise in applications in terms of context?
- How can we use real-world situations to construct and compare linear and exponential models and solve problems?

Topic A Objectives

Lesson 1:

Topic A: Linear and Exponential Sequences

Lesson 1
Lesson 2
(introduce students to the sequences and the formulas so that they can be familiar when they move to Lesson 3; this lesson focuses on writing sequences which may be fully taught for enrichment)
Lesson 3
Lesson 4
Optional: Before Lesson 5, Review material covered in Module 1, Lesson 3: Graphs of Exponential Functions
Lesson 5
Lesson 6
Lesson 7

Special Note: *It is recommended that teachers assess student gaps and scaffold accordingly using the resources/ tasks/lessons in the Resource Toolbox or those provided under Additional Resources.*

Also, assessments other than Mid-Module and End-of-Module assessments should be given based upon the lessons taught and the needs of the students.

Additional Resources:
Khan Academy Videos: Arithmetic and

Vocabulary for Module 3:
Average Rate of Change
Domain
Function
Linear Function
Piecewise Linear Function
Range

Familiar Terms and Symbols for Module 3:
Algebraic Expression, Coefficient of a Monomial, Constant, Equation, Equivalent Expressions, Equivalent Polynomial Expressions, Factored Expression, Monomial, Number Sentence, Numerical Expression, Numerical Symbol, Polynomial Expression, Simple Expression, Solution, Solution Set, Terms of a Polynomial, Truth Values of a Number Sentence, Variable Symbol

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Quarter 2 — Algebra I

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
Cluster: Build a function that models a relationship between two quantities. ➢ **A1. F.BF.A.1** Write a function that describes a relationship between two quantities. ★ **a.** Determine an explicit expression, a recursive process, or steps for calculation from a context. **Domain**: Linear, Quadratic, and Exponential Models ★ **Cluster:** Construct and compare linear, quadratic, and exponential models and solve problems. ➢ **A1. F.LE.A.1** Distinguish between situations that can be modeled with linear functions and with exponential functions. **a.** Recognize that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals. **b.** Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. **c.** Recognize situations in which a quantity grows or decays by a constant factor per unit interval relative to another. ■ **A1. F.LE.A.2** Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a table, a description of a relationship, or input-output pairs. ➢ **A1. F.LE.A.3** Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.	• Students examine sequences and are introduced to the notation used to describe them. **Lesson 2** • Students write sequences with recursive and explicit formulas. . **Lesson 3:** • Students learn the structure of arithmetic and geometric sequences. **Lesson 4:** • Students compare the rate of change for simple and compound interest and recognize situations in which a quantity grows by a constant percent rate per unit interval. **Lesson 5**: • Students are able to model with and solve problems involving exponential formulas. **Lesson 6**: • Students compare linear and exponential models of population growth. **Lesson 7:** • Students describe and analyze exponential decay models; they recognize that in a formula that models exponential decay, the growth factor *b* is less than 1; or, equivalently, when *b* is greater than 1, exponential formulas with negative exponents could also be used to model decay.	Geometric Sequences Khan Academy Videos: Exponential vs Linear Growth *Arithmetic and Geometric Sequences* MVP Module 3 Task 1 Growing Dots MVP Module 3 Task 2 Growing, Growing Dots *Linear & Exponential Functions* MVP Module 4 Task 1 Connecting the Dots: Piggies and Pools MVP Module 4 Task 4 Linear, Exponential, or Neither MVP Module 4 Task 5 Getting Down to Business	

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Quarter 2 — Algebra I

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
Domain: Interpreting Functions **Cluster:** Understand the concept of a function and use function notation. **A1. F.IF.A.1** Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If *f* is a function and *x* is an element of its domain, then *f*(*x*) denotes the output of *f* corresponding to the input *x*. The graph of *f* is the graph of the equation *y* = *f*(*x*). **A1. F.IF.A.2** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. **Domain**: Interpreting Functions **Cluster:** Interpret functions that arise in applications in terms of the context. **A1. F.IF.B.3 (formerly F.IF.B.4)** For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. ★ **A1. F.IF.B.4 (formerly F.IF.B.5)** Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. ★ **Domain**: Interpreting Functions **Cluster:** Analyze functions using different representations. ➢ **A1. F.IF.C.6** Graph functions expressed symbolically and show key features of the graph, by hand and using technology.	**Topic B Objectives:** **Lesson 8**: • Students use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. • Students create functions that represent a geometric situation and relate the domain of a function to its graph and to the relationship it describes. **Lessons 9:** • Students understand that a function from one set (called the domain) to another set (called the range) assigns each element of the domain to exactly one element of the range. • Students use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. **Lessons 10:** • Students understand that a function from one set (called the domain) to another set (called the range) assigns each element of the domain to exactly one element of the range and understand that if *f* is a function and *x* is an element of its domain, then *f*(x) denotes the output of *f* corresponding to the input *x*. • Students use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. **Lesson 11:** • Students understand set builder notation for the graph of a real-valued function: {(*x*, *f*(*x*)) | *x* ∈ *D*}. • Students learn techniques for graphing functions and relate the domain of a	**Topic B: Functions and Their Graphs** Lesson 8 Lesson 9 Lesson 10 Lesson 11 Lesson 12 (omit) Lesson 13 Lesson 14 **Special Note:** *It is recommended that teachers assess student gaps and scaffold accordingly using the resources/ tasks/lessons in the Resource Toolbox or those provided under Additional Resources.* *Also, assessments other than Mid-Module and End-of-Module assessments should be given based upon the lessons taught and the needs of the students.* **Additional Resources:** Khan Academy Videos: Functions TN Task Arc-Algebra I: Creating and Interpreting Functions: *Functions* MVP Module 5 Task 1 Getting Ready for a Pool Party MVP Module 5 Task 2 Floating Down the River MVP Module 5 Task 3 Features of Functions MVP Module 5 Task 4 The Water Park MVP Module 5 Task 6 Interpreting Functions MVP Module 5 Task 7 A Water Function MVP Module 5 Task 8 To Function or Not to Function MVP Module 8 Task 9 Match that Function MathBits Algebra I Notebook	

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
a. Graph linear and quadratic functions and show intercepts, maxima, and minima.	function to its graph. **Lesson 12**: • Students understand the meaning of the graph of $y = f(x)$, namely $\{(x,y) \mid x \in D \text{ and } y = f(x)\}$. • Students understand the definitions of when a function is increasing or decreasing. **Lesson 13:** • Students create tables and graphs of functions and interpret key features including intercepts, increasing and decreasing intervals, and positive and negative intervals. **Lesson 14:** • Students compare linear and exponential models by focusing on how the models change over intervals of equal length. Students observe from tables that a function that grows exponentially will eventually exceed a function that grows linearly.	**Mid-Module 3 Assessment** ***(Complete by 11/16/18; do not use problems from omitted lessons)***	
Domain: Reasoning with Equations and Inequalities **Cluster:** Represent and solve equations and inequalities graphically. ■ **A1. A. REI.D.6 (formerly A. REI.D.11)** Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the approximate solutions using technology. ★ **Domain**: Interpreting Functions **Cluster:** Analyze functions using different representations. ➢ **A1. F.IF.C.6 (formerly F.IF.C.7)** Graph functions expressed	**Topic C Objectives:** **Lesson 15:** • Students examine the features of piecewise functions including the absolute value function and step functions. • Students understand that the graph of a function f is the graph of the equation $y = f(x)$. **Lesson 16:** • Students discover that the multi-step and exact way of solving $\|2x - 5\| = \|3x + 1\|$ using algebra can sometimes be avoided by recognizing that an equation of the form $f(x) = g(x)$ can be solved visually by looking for the intersection points of the graphs	**Topic C: Transformations of Functions** **Optional:** Before Lesson 15, Review material covered in Module 1, Lesson 1: Graphs of Piecewise Linear Functions Lesson 15 Lesson 16 Lesson 17 Lesson 18 Lesson 19 Lesson 20 (omit) **Additional Resource(s):** Khan Academy Videos: Absolute Value and Piecewise Functions **Special Note:** *It is recommended that teachers assess student gaps and scaffold*	

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
symbolically and show key features of the graph, by hand and using technology. **a**. Graph linear and quadratic functions and show intercepts, maxima, and minima. **Domain**: Building Functions **Cluster:** Build new functions from existing functions. ➢ A1. F.BF.B.2 **(formerly F.BF.B.3)** Identify the effect on the graph of replacing *f(x)* by *f(x)* + *k*, *k f(x)*, *f(kx)*, and *f(x + k)* for specific values of *k* (both positive and negative); find the value of *k* given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology.	of $y = f(x)$ and $y = g(x)$. **Lesson 17:** • Students examine that a vertical translation of the graph of $y = f(x)$ corresponds to changing the equation from $y = f(x)$ to $y = f(x) + k$. • Students examine that a vertical scaling of the graph of $y = f(x)$ corresponds to changing the equation from $y = f(x)$ to $y = kf(x)$. **Lesson 18:** • Students examine that a horizontal translation of the graph of $y = f(x)$ corresponds to changing the equation from $y = f(x)$ to $y = f(x - k)$. **Lesson 19:** • Students examine that a horizontal scaling with scale factor k of the graph of $y = f(x)$ corresponds to changing the equation from $y = f(x)$ to $y = f[(1/k)(x)]$. **Lesson 20:** • Students apply their understanding of transformations of functions and their graphs to piecewise functions.	*accordingly using the resources/ tasks/lessons in the Resource Toolbox or those provided under Additional Resources.* *Also, assessments other than Mid-Module and End-of-Module assessments should be given based upon the lessons taught and the needs of the students.*	
Domain: Create equations **Cluster:** Create equations that describe numbers or relationships. ■ A1.A.CED.A.1 Create equations and inequalities in one variable and use them to solve problems. **Domain**: Building Functions **Cluster:** Build a function that models a relationship between two quantities. ➢ A1. F.BF.A.1 Write a function that describes a relationship between two quantities. ★ **a.** Determine an explicit expression, a	**Topic D Objectives:** **Lesson 21:** ➢ Students create models and understand the differences between linear and exponential models that are represented in different ways. **Lesson 22:** • Students apply knowledge of exponential functions and transformations of functions to a contextual situation. **Lesson 23:** • Students apply knowledge of exponential functions and transformations of functions to a contextual situation.	**Topic D: Using Functions and Graphs to Solve Problems** Lesson 21 Lesson 22 (optional) Lesson 23 (optional) Lesson 24 (optional) **Additional Resource(s):** MathBits Algebra I Notebook	

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
recursive process, or steps for calculation from a context **Domain**: Linear, Quadratic, and Exponential Models★ **Cluster:** Construct and compare linear, quadratic, and exponential models and solve problems. ■ A1. F.LE.A.2 Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a table, a description of a relationship, or input-output pairs. **Domain**: Seeing Structure in Expressions **Cluster:** Write expressions in equivalent forms to solve problems. ■ A1.A.SSE.B.3 Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. ★ **c.** Use the properties of exponents to rewrite exponential expressions **Domain**: Linear, Quadratic, and Exponential Models★ **Cluster:** Interpret expressions for functions in terms of the situation they model. ➢ A1. F.LE.B.4 **(formerly F.LE.B.5)** Interpret the parameters in a linear or exponential function in terms of a context. **Domain**: Interpreting Functions **Cluster:** Interpret functions that arise in applications in terms of the context. ■ A1. F.IF.B.3 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given	**Lesson 24: (optional)** ➢ Students create piecewise and step functions that relate to real-life situations and use those functions to solve problems. ➢ Students interpret graphs of piecewise and step functions in a real-life situation.	**End-of-Module 3 Assessment** **(Complete by 12/14/18; do not use problems from omitted lessons)** **Special Note**: *It is recommended that teachers should begin preparing for next quarter with by attending the Module Study for Module 4 that will be held towards the end of the quarter.*	

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
a verbal description of the relationship. ★ A1. F.IF.B.4 Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. ★			

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RESOURCE TOOLBOX		
Standards ***Teacher Guide* to Algebra I Standards: Linear Equations** **HS Flip Book with Examples of Each Standard** CCSS http://www.ccsstoolbox.org/ http://parcconline.org/ Achieve **Tennessee Academic Standards for Mathematics** **Tennessee Assessment LiveBinder**		**Videos** Khan Academy The Futures Channel The Teaching Channel Illuminations (NCTM) Get The Math
Calculator http://www.atomiclearning.com/ti_84 TICommonCore.com http://www.casioeducation.com/educators	**Manipulatives/Other Resources** **Algebra Tiles** MathBits Algebra I Notebook Problem Attic OpenEd National Library of Virtual Manipulatives http://www.shodor.org/interactivate/activities/ Edugoodies Graphic Organizers (9-12)	**NWEA MAP** **Resources:**https://teach.mapnwea.org/assist/help_map/ApplicationHelp.htm#UsingTestResults/MAPReportsFinder.htm - Sign in and Click the Learning Continuum Tab – this resources will help as you plan for intervention, and differentiating small group instruction on the skill you are currently teaching. (Four Ways to Impact Teaching with the Learning Continuum) https://support.nwea.org/khanrit - These Khan Academy lessons are aligned to RIT scores.
Tasks/Lessons Edutoolbox (formerly Tncore.org) Mathematics Assessment Project (MARS Tasks, Lessons & PD Modules) Dan Meyer's Three-Act Math Tasks Illustrative Math Tasks UT Dana Center Inside Math Tasks LearnZillion		**ACT** TN ACT Information & Resources ACT College & Career Readiness Mathematics Standards

Shelby County Schools – Algebra I- October 2018					
Mon	**Tue**	**Wed**	**Thu**	**Fri**	
1	**2**	**3**	**4**	**5**	
8 **Fall Break**	**9** **Fall Break**	**10** **Fall Break**	**11** **Fall Break**	**12** **Fall Break**	
15 **Q2 Begins** **Prepare to Launch Module 3, Topic A (Lessons 1-7)**	**16** **Prepare to Launch Module 3, Topic A (Lessons 1-7)**	**17** **Begin Module 3, Topic A (Lessons 1-7)**	**18**	**19**	
22 **Module 3, Topic A (Lessons 1-7) cont.**	**23**	**24**	**25**	**26**	
29 **Module 3, Topic A (Lessons 1-7) cont.**	**30**	**31** **Halloween** **Prepare to Launch Module 3, Topic B (Lessons 8-14)**			

Shelby County Schools – Algebra I - November 2018

Mon	Tue	Wed	Thu	Fri	
			1 Prepare to Launch Module 3, Topic B (Lessons 8-14)	**2** Begin Module 3, Topic B (Lessons 8-14, omit Lesson 12)	
5 Module 3, Topic B (Lessons 8-14, omit Lesson 12) cont.	**6**	**7**	**8**	**9**	
12 Veteran's Day (Teachers & Students Out)	**13**	**14** Assessment, Remediation, and/or Further Application	**15**	**16** Mid Module Assessment Due (do not use problems from omitted lessons)	
19 Prepare to Launch Module 3, Topic C (Lessons 15-20, omit Lesson 20)	**20** Prepare to Launch Module 3, Topic C (Lessons 15-20, omit Lesson 20)	**21** Thanksgiving Break	**22** Thanksgiving Break	**23** Thanksgiving Break	
26 Begin Module 3, Topic C (Lessons 15-20, omit Lesson 20)	**27**	**28**	**29**	**30**	

Shelby County Schools – Algebra I – December 2018

Mon	Tue	Wed	Thu	Fri	
3 Module 3, Topic C (Lessons 15-20, omit Lesson 20) cont.	**4**	**5** Prepare to Launch Module 3, Topic D (Lessons 21-24)	**6** Begin Module 3, Topic D (Lessons 21-24, omit Lesson 24)	**7**	
10 Module 3, Topic D (Lessons 21-24, omit Lesson 24) cont.	**11**	**12** Assessment, Remediation, and/or Further Application	**13**	**14** End of Module Assessment Due (do not use problems from omitted lessons)	
17 Semester Exams	**18** Semester Exams	**19** Q2 Ends Semester Exams	**20** Winter Break	**21** Winter Break	
24 Winter Break	**25** Christmas Day Winter Break	**26** Winter Break	**27** Winter Break	**28** Winter Break	