Sample Year-Long Schedule for Math Instruction
SPRINGBOARD Algebra I

The following sample schedule integrates the Springboard curriculum, LEAP 360 Interim Assessments and flex days to allow teachers to move at a pace that best supports student learning. Flex days could be used for remediation, enrichment lessons, assessment, or other instructional activities. This sample should be used to guide instructional timing but should not dictate exactly what lesson a teacher should be on during a given day. The guidance has been broken into 9 weeks, as this is the calendar that most Louisiana schools systems follow.

- Coding: 1-1 represents Lesson 1-Activity 1
- Lessons marked as "optional for enrichment" in the Springboard Curriculum Map have not been included in this calendar. Teachers may determine to use these during "flex" days or after state testing.
- Even though only one day on this calendar has been marked for each of the LEAP Interim assessments, teachers may determine to split these over multiple days.
- The SpringBoard Math LEAP 360 Diagnostic Mapping can be used to support teachers in identifying where students may have unfinished learning and need additional supports.

FLEX days have been built into the calendar to address the following:

- Unpacking the Assessments
- Embedded Assessments
- Small Group Work / Mini Lessons
- Short Cycle Assessments
- Remediation Mini-lessons
- Khan Academy Practices
- Activity Practices
- Reflection of the Work

	Day 1	**Day 2**	**Day 3**	**Day 4**	**Day 5**
Week 1	FLEX	FLEX	LEAP 360 Diagnostic Assessment	1-1	1-2
Week 2	FLEX	2-1	2-2	FLEX	2-3
Week 3	2-4	2-5	FLEX	3-1	3-2
Week 4	3-3	FLEX	FLEX	Unit 1 Assessment	FLEX
Week 5	5-1	5-2	5-3	FLEX	6-1
Week 6	6-2	6-3	FLEX	7-1	7-2
Week 7	7-3	8-1	8-2	9-1	9-2
Week 8	9-3	10-1	10-2	10-3	11-1
Week 9	11-2	11-3	FLEX	12-1	12-2
Week 10	12-3	12-4	FLEX	13-1	13-2
Week 11	13-3	FLEX	FLEX	Unit 2 Assessment	FLEX
Week 12	14-1	14-2	14-3	14-4	FLEX
Week 13	15-1	15-2	15-3	FLEX	16-1
Week 14	16-2	FLEX	17-1	17-2	17-3

Week 15	17-4	17-5	FLEX	18-1	18-2
Week 16	FLEX	FLEX	Unit 3 Assessment	FLEX	FLEX
Week 17	19-1	19-2	19-3	FLEX	20-1
Week 18	20-2	20-3	LEAP 360 Interim Form 1	21-1	21-2
Week 19	FLEX	22-1	22-2	22-3	FLEX
Week 20	23-1	23-2	FLEX	24-1	24-2
Week 21	24-3	FLEX	25-1	25-2	25-3
Week 22	FLEX	26-1	26-2	FLEX	27-1
Week 23	27-2	FLEX	FLEX	Unit 4 Assessment	FLEX
Week 24	29-1	29-2	FLEX	30-1	30-2
Week 25	30-3	FLEX	31-1	31-2	31-3
Week 26	FLEX	32-1	32-2	32-3	32-4
Week 27	FLEX	LEAP 360 Interim Form 2	33-1	33-2	FLEX
Week 28	34-1	34-2	34-3	FLEX	FLEX
Week 29	Unit 5 Assessment	FLEX	36-1	36-2	FLEX
Week 30	37-1	37-2	37-3	FLEX	38-1
Week 31	38-2	FLEX	39-1	39-2	39-3
Week 32	39-4	FLEX	40-1	40-2	Unit 6 Assessment
Week 33	Reserved for state testing (dates will vary)				
Week 34	To best prepare your students for success in future math courses, use this time to continue pursuing mastery of A1: A-REI.B.4a. If students have mastered completing the square, a review of Grade 8 Geometry standards may prove advantageous for preparing students for future success.				
Week 35					
Week 36					

Louisiana Algebra 1 Curriculum Map

ACTIVITY 1 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**–Patterns and Equations (p. 61)	□ A1: N-Q.A.1 ■ A1: A-CED.A.1 ■ A1: A-CED.A..4 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3 □ A1: F-LE.A.1b	Assessment Focus: • Identifying patterns • Modeling patterns with expressions • Using patterns to make predictions • Writing, solving, and interpreting multi-step equations • Solving literal equations for a variable
1	Remediation	Unit 1 **Getting Ready** (p. 2)	7.NS.A.1b 8.EE.A.1 7.NS.A.3 6.NS.B.3 8.EE.C.7 7.EE.A.1 6.SP.B.5	• Perform arithmetic operations on fractions and mixed numbers. • Simplify arithmetic expressions involving exponents. • Multiply and divide mixed numbers to solve real-world problems. • Compare and order integer expressions. • Perform arithmetic operations with decimals. • Solve one-step equations. • Simplify algebraic expressions using the distributive property. • Use Venn diagrams to organize data.
		Operations with Fractions (p. I 1)	8.EE.A.1	• Perform arithmetic operations on fractions and mixed numbers.
		Exponents (p. I 4)	7.NS.A.1	• Simplify arithmetic expressions involving exponents.
		Operations with Mixed Numbers (p. I 5)	7.NS.A.3	• Multiply and divide mixed numbers to solve real-world problems.
		Integers (p. I 7)	7.NS.A.3	• Use number lines to locate integers. • Compare and order integer expressions.
		Decimals (p. I 11)	6.NS.B.3	• Perform arithmetic operations with decimals.
		Solving One-Step Equations (p. I 14)	8.EE.C.7	• Solve one-step equations.
		Simplifying Expressions (p. I 15)	7.EE.A.1	• Simplify algebraic expressions using the distributive property.
		Venn Diagrams (p. I 16)	6.SP.B.5	• Use Venn diagrams to organize data.
1	On Grade Level	**Lesson 1-1** Numeric and Graphic Representations of Data (p. 3)	□ A1: N-Q.A.1 □ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Identify patterns in data. • Use tables, graphs, and expressions to model situations. • Use expressions to make predictions.

Louisiana Algebra 1 Curriculum Map

ACTIVITY 1 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 1-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 1-1 Practice (p. 7)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Identify patterns in data. • Use tables, graphs, and expressions to model situations. • Use expressions to make predictions.
1	On Grade Level	**Lesson 1-2** Writing Expressions (p. 8)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Use patterns to write expressions. • Use tables, graphs, and expressions to model situations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 1-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 1-2 Practice (p. 13)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Use patterns to write expressions. • Use tables, graphs, and expressions to model situations.
1	On Grade Level	**Activity 1 Practice** (p. 14)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Identify patterns in data. • Use tables, graphs, and expressions to model situations. • Use expressions to make predictions. • Use patterns to write expressions. • Use tables, graphs, and expressions to model situations.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 1** (p. 618).	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1a A2: F-BF.A.2	• Identify patterns in data. • Use tables, graphs, and expressions to model situations. • Use expressions to make predictions. • Use patterns to write expressions. • Use tables, graphs, and expressions to model situations.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to dimensional analysis • Writing expressions with variables • Writing expressions with variables & parentheses • Evaluating an expression with one variable • Evaluating expressions with variables: temperature **Khan Academy Practice: Introduction to algebra**	

Louisiana Algebra 1 Curriculum Map

ACTIVITY 2 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 2-1** Writing and Solving Equations (p. 15)	□ A1: N-Q.A.1 □ A1: N-Q.A.2 ■ A1: A-SSE.A.1a ■ A1: A-CED.A..1 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3	• Use the algebraic method to solve an equation. • Write and solve an equation to model a real-world situation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 2-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 2-1 Practice (p. 18)	□ A1: N-Q.A.1 □ A1: N-Q.A.2	• Use the algebraic method to solve an equation. • Write and solve an equation to model a real-world situation.
		Mini-Lesson: Solving Equations Using Algebra Tiles (p. I 18)	8.EE.C.7	• Use algebra tiles to solve equations.
		Mini-Lesson: Solving Equations Using Flow Charts (p. I 20)	8.EE.C.7	• Use flow charts to solve equations.
1	On Grade Level	**Lesson 2-2** Equations with Variables on Both Sides (p. 19)	□ A1: N-Q.A.1 □ A1: N-Q.A.2 ■ A1: A-SSE.A.1a ■ A1: A-CED.A..1 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3	• Write and solve an equation to model a real-world situation. • Interpret parts of an expression in terms of its context.

ACTIVITY 2 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 2-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 2-2 Practice (p. 21)	A1: N-Q.A.1 A1: N-Q.A.2	• Write and solve an equation to model a real-world situation. • Interpret parts of an expression in terms of its context.
		Mini-Lesson: Properties of Real Numbers (p. I 22)	7.NS.A.1d 7.NS.A.2c	• Identify properties of real numbers.
		Mini-Lesson: Connect to Business—*Profit, Revenue, and Cost (p. I 24)*	8.EE.C.7	• Solve real-world problems related to business.
1	On Grade Level	**Lesson 2-3** Solving More Complex Equations (p. 22)	A1: A-REI.A.1 A1: A-REI.B.3	• Solve complex equations with variables on both sides and justify each step in the solution process. • Write and solve an equation to model a real-world situation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 2-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 2-3 Practice (p. 24)	A1: A-REI.A.1 A1: A-REI.B.3	• Solve complex equations with variables on both sides and justify each step in the solution process. • Write and solve an equation to model a real-world situation.
1	On Grade Level	**Lesson 2-4** Equations with No Solution or Infinitely Many Solutions (p. 25)	A1: A-REI.A.1 A1: A-REI.B.3	• Identify equations that have no solution. • Identify equations that have infinitely many solutions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 2-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 2-4 Practice (p. 27)	A1: A-REI.A.1 A1: A-REI.B.3	• Identify equations that have no solution. • Identify equations that have infinitely many solutions.
1	On Grade Level	**Lesson 2-5** Solving Literal Equations for a Variable (p. 28)	A1: N-Q.A.1 A1: N-Q.A.2 A1: A-SSE.A.1b A1: A-CED.A..4	• Solve literal equations for a specified variable. • Use a formula that has been solved for a specified variable to determine an unknown quantity.

Key: Major Work, Supporting Work, Additional Work

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 2-5 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 2-5 Practice (p. 30)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1b ■ A1: A-CED.A..4	• Solve literal equations for a specified variable. • Use a formula that has been solved for a specified variable to determine an unknown quantity.
1	On Grade Level	**Activity 2 Practice** (p. 31)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1 ■ A1: A-CED.A..1 ■ A1: A-CED.A..4 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3	• Use the algebraic method to solve an equation. • Write and solve an equation to model a real-world situation. • Write and solve an equation to model a real-world situation. • Interpret parts of an expression in terms of its context. • Solve complex equations with variables on both sides and justify each step in the solution process. • Write and solve an equation to model a real-world situation. • Identify equations that have no solution. • Identify equations that have infinitely many solutions. • Solve literal equations for a specified variable. • Use a formula that has been solved for a specified variable to determine an unknown quantity.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 2**. (p. 618)	☐ A1: N-Q.A.1 ☐ A1: N-Q.A.2 ■ A1: A-SSE.A.1 ■ A1: A-CED.A..1 ■ A1: A-CED.A..4 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3	• Use the algebraic method to solve an equation. • Write and solve an equation to model a real-world situation. • Write and solve an equation to model a real-world situation. • Interpret parts of an expression in terms of its context. • Solve complex equations with variables on both sides and justify each step in the solution process. • Write and solve an equation to model a real-world situation. • Identify equations that have no solution. • Identify equations that have infinitely many solutions. • Solve literal equations for a specified variable. • Use a formula that has been solved for a specified variable to determine an unknown quantity.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 1**–Patterns and Equations (p. 33)	☐ A1: N-Q.A.1 ■ A1: A-CED.A..1 ■ A1: A-CED.A..4 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3 ☐ A1: F-LE.A.1b	Assessment Focus: • Identifying patterns • Modeling patterns with expressions • Using patterns to make predictions • Writing, solving, and interpreting multi-step equations • Solving literal equations for a variable
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**–Patterns and Equations (p. 618)	☐ A1: N-Q.A.1 ■ A1: A-CED.A..1 ■ A1: A-CED.A..4 ■ A1: A-REI.A.1 ■ A1: A-REI.B.3 ☐ A1: F-LE.A.1b	Assessment Focus: • Identifying patterns • Modeling patterns with expressions • Using patterns to make predictions • Writing, solving, and interpreting multi-step equations • Solving literal equations for a variable
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Same thing to both sides of equations • Why we do the same thing to both sides: Variables on both sides • Representing a relationship with an equation • One-step equations intuition • One-step division equation • One-step multiplication equations • One-step subtraction equations • Simple equations: examples solving a variety of forms • Intro to two-step equations • One-step addition & subtraction equations • Dividing both sides of an equation • Two-step equations intuition • Intro to equations with variables on both sides • Equations with parentheses • Worked example: number of solutions to equations • Number of solutions to equations • Manipulating formulas: area • Solving an equation for a variable **Khan Academy Practice: Solving basic equations & inequalities**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2**–Inequalities and Absolute Value (p. 61)	A1: A-CED.A..1 A1: A-CED.A..3 A1: A-REI.B.3	Assessment Focus: • Writing, solving, and graphing inequalities • Writing and graphing compound inequalities • Solving and graphing absolute value inequalities
1	On Grade Level	**Lesson 3-1** Inequalities and Their Solutions (p. 35)	A1: A-CED.A..1 A1: A-CED.A..3 A1: A-REI.B.3	• Understand what is meant by a solution of an inequality. • Graph solutions of inequalities on a number line.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 3-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 3-1 Practice (p. 37)	A1: A-CED.A..1 A1: A-CED.A..3 A1: A-REI.B.3	• Understand what is meant by a solution of an inequality. • Graph solutions of inequalities on a number line.
		Mini-Lesson: Verifying Solutions to Inequalities (p. I 25)	A1: A-REI.B.3	• Determine and verify solutions to inequalities.
1	On Grade Level	**Lesson 3-2** Solving Inequalities (p. 38)	A1: A-CED.A..1 A1: A-CED.A..3 A1: A-REI.B.3	• Write inequalities to represent real-world situations. • Solve multi-step inequalities.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 3-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 3-2 Practice (p. 42)	A1: A-CED.A..1 A1: A-CED.A..3 A1: A-REI.B.3	• Write inequalities to represent real-world situations. • Solve multi-step inequalities.
1	On Grade Level	**Lesson 3-3** Compound Inequalities (p. 43)	A1: A-REI.B.3	• Graph compound inequalities. • Solve compound inequalities.

ACTIVITY 3 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 3-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 3-3 Practice (p. 46)	■ A1: A-REI.B.3	• Graph compound inequalities. • Solve compound inequalities.
1	On Grade Level	**Activity 3 Practice** (p. 47)	■ A1: A-CED.A..1 ■ A1: A-CED.A..3 ■ A1: A-REI.B.3	• Understand what is meant by a solution of an inequality. • Graph solutions of inequalities on a number line. • Write inequalities to represent real-world situations. • Solve multi-step inequalities. • Graph compound inequalities. • Solve compound inequalities.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 3**. (p. 618)	■ A1: A-CED.A..1 ■ A1: A-CED.A..3 ■ A1: A-REI.B.3	• Understand what is meant by a solution of an inequality. • Graph solutions of inequalities on a number line. • Write inequalities to represent real-world situations. • Solve multi-step inequalities. • Graph compound inequalities. • Solve compound inequalities.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: One-step inequality word problem • One-step inequality involving addition • Inequalities using addition and subtraction • One-step inequalities examples • One-step inequalities: $-5c \leq 15$ • Two-step inequality word problems: apples • Two-step inequalities • Multi-step inequalities • Compound inequalities examples **Khan Academy Practice: Solving basic equations & inequalities**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Lesson 4-1** Absolute Value Equations (p. 49)	A1: A-CED.A..1	• Understand what is meant by a solution of an absolute value equation. • Solve absolute value equations.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 4-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 4-1 Practice (p. 53)	A1: A-CED.A..1 A1: A-CED.A..1	• Understand what is meant by a solution of an absolute value equation. • Solve absolute value equations.
		Mini-Lesson: Solution Set Notation (p. I 26)	A1: A-REI.B.3	• Determine solution sets to equations and inequalities.
1	Enrichment	**Lesson 4-2** Absolute Value Inequalities (p. 54)	A1: A-CED.A..1	• Solve absolute value inequalities. • Graph solutions of absolute value inequalities.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 4-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 4-2 Practice (p. 58)	A1: A-CED.A..1	• Solve absolute value inequalities. • Graph solutions of absolute value inequalities.
1	Enrichment	**Activity 4 Practice** (p. 59)	A1: A-CED.A..1	• Understand what is meant by a solution of an absolute value equation. • Solve absolute value equations. • Solve absolute value inequalities. • Graph solutions of absolute value inequalities.
1	Enrichment	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 4**. (p. 618)	A1: A-CED.A..1	• Understand what is meant by a solution of an absolute value equation. • Solve absolute value equations. • Solve absolute value inequalities. • Graph solutions of absolute value inequalities.

ACTIVITY 4 | **Unit 1: Equations and Inequalities** | **Pacing: 40 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 2**–Inequalities and Absolute Value (p.61)	■ A1: A-CED.A..1 ■ A1: A-CED.A..3 ■ A1: A-REI.B.3	Assessment Focus: • Writing, solving, and graphing inequalities • Writing and graphing compound inequalities • Solving and graphing absolute value inequalities
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**–Inequalities and Absolute Value (p. 618)	■ A1: A-CED.A..1 ■ A1: A-CED.A.3 ■ A1: A-REI.B.3	Assessment Focus: • Writing, solving, and graphing inequalities • Writing and graphing compound inequalities • Solving and graphing absolute value inequalities
1	On Grade Level	**End-of-Unit 1 Assessment** (SBD)*	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to absolute value equations and graphs • Worked example: absolute value equations with no solution • Intro to absolute value inequalities **Khan Academy Practice: Absolute value equations, functions, & inequalities**	

** contains some enrichment*

Louisiana Algebra 1 Curriculum Map

ACTIVITY 5 | **Unit 2: Functions** | **Pacing: 87 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**–Representations of Functions (p. 121)	■ A1: F-IF.A.1 ■ A1: F-IF.A.2 ■ A1: F-IF.B.4 ■ A1: F-IF.B.5 ○ A1: F-BF.B.3	Assessment Focus: • Functions, range and domain • Graphs of functions and their key features • Writing and using equations of functions • Transforming functions
1	Remediation	Unit 2 **Getting Ready** (p. 64)	4.OA.C.5 5.OA.B.3 6.EE.B5 6.EE.A.2 6.NS.C.8 8.F.B.4 7.EE.B.4a 8.EE.C.7b	• Identify and extend patterns represented in a table. • Graph inequalities on a number line and identify the integers in the solution set. • Substitute given values into algebraic expressions, then simplify. • Identify and plot ordered pairs on the coordinate plane. • Write equations for data given in a table. • Write and solve linear equations.
		Patterns (p. I 38)	4.OA.C.5 5.OA.B.3	• Identify and extend patterns represented in a table.
		Inequalities (p. I 39)	6.EE.B5	• Graph inequalities on a number line and identify the integers in the solution set.
		Evaluating Expressions (p. I 43)	6.EE.A.2	• Substitute given values into algebraic expressions, then simplify.
		Coordinate Plane (p. I 44)	6.NS.C.8	• Identify and plot ordered pairs on the coordinate plane.
		Representing Data with an Equation (p. I 49)	8.F.B.4	• Write equations for data given in a table.
		Algebraic Equations (p. I 50)	7.EE.B.4a 8.EE.C.7b	• Write and solve linear equations.
1	On Grade Level	**Lesson 5-1** Relations and Functions (p. 65)	8.F.A.1 ■ A1: F-IF.A.1	• Represent relations and functions using tables, diagrams, and graphs. • Identify relations that are functions.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 5-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 5-1 Practice (p. 70)	8.F.A.1 A1: F-IF.A.1	• Represent relations and functions using tables, diagrams, and graphs. • Identify relations that are functions.
1	On Grade Level	**Lesson 5-2** Domain and Range (p. 71)	8.F.A.1 A1: F-IF.A.1	• Describe the domain and range of a function. • Find input-output pairs for a function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 5-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 5-2 Practice (p. 75)	8.F.A.1 A1: F-IF.A.1	• Describe the domain and range of a function. • Find input-output pairs for a function.
1	On Grade Level	**Lesson 5-3** Function Notation (p. 76)	A1: F-IF.A.1 A1: F-IF.A.2	• Use and interpret function notation. • Evaluate a function for specific values of the domain.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 5-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 5-3 Practice (p. 78)	A1: F-IF.A.1 A1: F-IF.A.2	• Use and interpret function notation. • Evaluate a function for specific values of the domain.
1	On Grade Level	**Activity 5 Practice** (p. 79)	A1: F-IF.A.1 A1: F-IF.A.2	• Represent relations and functions using tables, diagrams, and graphs. • Identify relations that are functions. • Describe the domain and range of a function. • Find input-output pairs for a function. • Use and interpret function notation. • Evaluate a function for specific values of the domain.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 5**. (p. 618)	A1: F-IF.A.1 A1: F-IF.A.2	• Represent relations and functions using tables, diagrams, and graphs. • Identify relations that are functions. • Describe the domain and range of a function. • Find input-output pairs for a function. • Use and interpret function notation. • Evaluate a function for specific values of the domain.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: What is a function? • Relations and functions • Recognizing functions from verbal description • Domain and range of a function • What is the domain of a function? • What is the range of a function? **Khan Academy Practice: Functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 6-1** Key Features of Graphs (p. 81)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5	• Relate the domain and range of a function to its graph. • Identify and interpret key features of graphs.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 6-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 6-1 Practice (p. 86)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5	• Relate the domain and range of a function to its graph. • Identify and interpret key features of graphs.
1	On Grade Level	**Lesson 6-2** More Complex Graphs (p. 87)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5	• Relate the domain and range of a function to its graph and to its function rule. • Identify and interpret key features of graphs.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 6-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 6-2 Practice (p. 91)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5	• Relate the domain and range of a function to its graph and to its function rule. • Identify and interpret key features of graphs.
1	On Grade Level	**Lesson 6-3** Graphs of Real-World Situations (p. 92)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Identify and interpret key features of graphs. • Determine the reasonable domain and range for a real-world situation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 6-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 6-3 Practice (p. 94)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Identify and interpret key features of graphs. • Determine the reasonable domain and range for a real-world situation.
1	On Grade Level	**Activity 6 Practice** (p. 95)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Relate the domain and range of a function to its graph. • Identify and interpret key features of graphs. • Relate the domain and range of a function to its graph and to its function rule. • Identify and interpret key features of graphs. • Identify and interpret key features of graphs. • Determine the reasonable domain and range for a real-world situation.

ACTIVITY 6 | Unit 2: Functions | Pacing: 87 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 6**. (p. 618)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Relate the domain and range of a function to its graph. • Identify and interpret key features of graphs. • Relate the domain and range of a function to its graph and to its function rule. • Identify and interpret key features of graphs. • Identify and interpret key features of graphs. • Determine the reasonable domain and range for a real-world situation.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Algebra Videos: Worked example: domain and range from graph • Recognizing functions from graph • Testing if a relationship is a function • Interpreting a graph example **Khan Academy Practice: Linear equations, functions, & graphs**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 7-1** The Spring Experiment (p. 97)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a	• Graph a function given a table. • Write an equation for a function given a table or graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 7-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 7-1 Practice (p. 100)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a	• Graph a function given a table. • Write an equation for a function given a table or graph.
1	On Grade Level	**Lesson 7-2** The Falling Object Experiment (p. 101)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a	• Graph a function describing a real-world situation and identify and interpret key features of the graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 7-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 7-2 Practice (p. 104)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a	• Graph a function describing a real-world situation and identify and interpret key features of the graph.
1	On Grade Level	**Lesson 7-3** The Radioactive Decay Experiment (p. 105)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7e	• Given a verbal description of a function, make a table and a graph of the function. • Graph a function, and identify and interpret key features of the graph.

ACTIVITY 7 | Unit 2: Functions | Pacing: 87 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 7-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 7-3 Practice (p. 108)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7e	• Given a verbal description of a function, make a table and a graph of the function. • Graph a function, and identify and interpret key features of the graph.
1	On Grade Level	**Activity 7 Practice** (p. 109)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Graph a function given a table. • Write an equation for a function given a table or graph. • Graph a function describing a real-world situation and identify and interpret key features of the graph. • Given a verbal description of a function, make a table and a graph of the function. • Graph a function, and identify and interpret key features of the graph.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 7.** (p. 618)	■ A1: A-REI.D.10 ■ A1: F-IF.B.5 □ A1: F-IF.C.7	• Graph a function given a table. • Write an equation for a function given a table or graph. • Graph a function describing a real-world situation and identify and interpret key features of the graph. • Given a verbal description of a function, make a table and a graph of the function. • Graph a function, and identify and interpret key features of the graph.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Exponential function graph • Interpreting a graph example **Khan Academy Practice: Linear equations, functions, & graphs**	

** contains some enrichment*

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 8-1** Exploring $f(x) + k$* (p. 111)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$. • Identify the transformation used to produce one graph from another.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 8-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 8-1 Practice (p. 114)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$. • Identify the transformation used to produce one graph from another.
1	On Grade Level	**Lesson 8-2** Exploring $f(x + k)$* (p. 119)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$. • Identify the transformation used to produce one graph from another.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 8-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 8-2 Practice (p. 118)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$. • Identify the transformation used to produce one graph from another.
1	On Grade Level	**Activity 8 Practice** (p. 119)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$. • Identify the transformation used to produce one graph from another. • Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$. • Identify the transformation used to produce one graph from another.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 8**. (p. 618)	A1: F-BF.B.3	• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$. • Identify the transformation used to produce one graph from another. • Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$. • Identify the transformation used to produce one graph from another.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 1**–Representations of Functions (p. 121)	■ A1: F-IF.A.1 ■ A1: F-IF.A.2 ■ A1: F-IF.B.4 ■ A1: F-IF.B.5 ○ A1: F-BF.B.3	Assessment Focus: • Functions, range, and domain • Graphs of functions and their key features • Writing and using equations of functions • Transforming functions
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**–Representations of Functions (p. 618)	■ A1: F-IF.A.1 ■ A1: F-IF.A.2 ■ A1: F-IF.B.4 ■ A1: F-IF.B.5 ○ A1: F-BF.B.3	Assessment Focus: • Functions, range, and domain • Graphs of functions and their key features • Writing and using equations of functions • Transforming functions
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Shifting functions • Graphing shifted functions **Khan Academy Practice: Functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2**–Linear Functions and Equations (p. 173)	■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: F-LE.A.2	Assessment Focus: • Modeling with tables, graphs and linear functions • Analyzing linear models
1	On Grade Level	**Lesson 9-1** Slope (p. 123)	■ A1: F-IF.B.6	• Determine the slope of a line from a graph. • Develop and use the formula for slope.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 9-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 9-1 Practice (p. 127)	■ A1: F-IF.B.6	• Determine the slope of a line from a graph. • Develop and use the formula for slope.
1	On Grade Level	**Lesson 9-2** Slope and Rate of Change (p. 128)	■ A1: F-IF.B.6	• Calculate and interpret the rate of change for a function. • Understand the connection between rate of change and slope.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 9-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 9-2 Practice (p. 132)	■ A1: F-IF.B.6	• Calculate and interpret the rate of change for a function. • Understand the connection between rate of change and slope.
1	On Grade Level	**Lesson 9-3** More about Slopes (p. 133)	■ A1: F-IF.B.6 □ A1: F-LE.A.1 □ A1: F-LE.A.1b	• Show that a linear function has a constant rate of change. • Understand when the slope of a line is positive, negative, zero, or undefined. • Identify functions that do not have a constant rate of change and understand that these functions are not linear.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 9-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 9-3 Practice (p. 136)	■ A1: F-IF.B.6 □ A1: F-LE.A.1 □ A1: F-LE.A.1b	• Show that a linear function has a constant rate of change. • Understand when the slope of a line is positive, negative, zero, or undefined. • Identify functions that do not have a constant rate of change and understand that these functions are not linear.
1	On Grade Level	**Activity 9 Practice** (p. 137)	■ A1: F-IF.B.6 □ A1: F-LE.A.1	• Determine the slope of a line from a graph. • Develop and use the formula for slope. • Calculate and interpret the rate of change for a function. • Understand the connection between rate of change and slope. • Show that a linear function has a constant rate of change. • Understand when the slope of a line is positive, negative, zero, or undefined. • Identify functions that do not have a constant rate of change and understand that these functions are not linear.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 9**. (p. 618)	■ A1: F-IF.B.6 □ A1: F-LE.A.1	• Determine the slope of a line from a graph. • Develop and use the formula for slope. • Calculate and interpret the rate of change for a function. • Understand the connection between rate of change and slope. • Show that a linear function has a constant rate of change. • Understand when the slope of a line is positive, negative, zero, or undefined. • Identify functions that do not have a constant rate of change and understand that these functions are not linear.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Worked example: slope from graph • Positive & negative slope • Slope (more examples) **Khan Academy Practice: Linear equations, functions, & graphs**	
desmos			**Consider using Desmos Classroom Activity Polygraph: Lines. Goals of this Activity:** Students will be able to: Identify important features of lines • Precisely describe these features to their peers • Increase their vocabulary relevant to lines	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 10-1** Direct Variation (p. 139)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: F-BF.A.1a □ A1: F-LE.B.5	• Write and graph direct variation. • Identify the constant of variation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 10-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 10-1 Practice (p. 143)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: F-BF.A.1a □ A1: F-LE.B.5	• Write and graph direct variation. • Identify the constant of variation.
1	On Grade Level	**Lesson 10-2** Indirect Variation (p. 144)	■ A1: A-CED.A.1 □ A1: F-BF.A.1 □ A1: F-BF.A.1a	• Write and graph indirect variations. • Distinguish between direct and indirect variation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 10-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 10-2 Practice (p. 147)	■ A1: A-CED.A.1 □ A1: F-BF.A.1 □ A1: F-BF.A.1a	• Write and graph indirect variations. • Distinguish between direct and indirect variation.
1	On Grade Level	**Lesson 10-3** Another Linear Model (p. 148)	□ A1: N-Q.A.3 ■ A1: A-CED.A.1 □ A1: F-LE.B.5	• Write, graph, and analyze a linear model for a real-world situation. • Interpret aspects of a model in terms of the real-world situation.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 10-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 10-3 Practice (p. 151)	☐ A1: N-Q.A.3 ■ A1: A-CED.A.1 ☐ A1: F-LE.B.5	• Write, graph, and analyze a linear model for a real-world situation. • Interpret aspects of a model in terms of the real-world situation.
1	Enrichment	**Lesson 10-4** Inverse Functions (p. 152)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 A2: F-BF.B.4a A2: F-BF.B.4 ☐ A1: F-LE.B.5	• Write the inverse function for a linear function. • Determine the domain and range of an inverse function.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 10-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 10-4 Practice (p. 156)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 A2: F-BF.B.4 ☐ A1: F-LE.B.5	• Write the inverse function for a linear function. • Determine the domain and range of an inverse function.
1	On Grade Level	**Activity 10 Practice** (p. 157)	☐ A1: N-Q.A.3 ■ A1: A-CED.A.1 ■ A1: F-IF.B.5 ☐ A1: F-BF.A.1 A2: F-BF.B.4 ☐ A1: F-LE.B.5	• Write and graph direct variation. • Identify the constant of variation. • Write and graph indirect variations. • Distinguish between direct and indirect variation. • Write, graph, and analyze a linear model for a real-world situation. • Interpret aspects of a model in terms of the real-world situation. • Write the inverse function for a linear function. • Determine the domain and range of an inverse function.

ACTIVITY 10 | Unit 2: Functions | Pacing: 87 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 10**. (p. 618)	□ A1: N-Q.A.3 ■ A1: A-CED.A.1 ■ A1: F-IF.B.5 □ A1: F-BF.A.1 A2: F-BF.B.4 □ A1: F-LE.B.5	• Write and graph direct variation. • Identify the constant of variation. • Write and graph indirect variations. • Distinguish between direct and indirect variation. • Write, graph, and analyze a linear model for a real-world situation. • Interpret aspects of a model in terms of the real-world situation. • Write the inverse function for a linear function. • Determine the domain and range of an inverse function.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to direct & inverse variation • Direct variation word problem: space travel • Intro to inverse functions **Khan Academy Practice: Linear equations, functions, & graphs**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 11-1** Identifying Arithmetic Sequences (p. 159)	A1: F-IF.B.5 A2: F-BF.A.2	• Identify sequences that are arithmetic sequences. • Use the common difference to determine a specified term of an arithmetic sequence.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 11-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 11-1 Practice (p. 161)	A1: F-IF.B.5 A2: F-BF.A.2	• Identify sequences that are arithmetic sequences. • Use the common difference to determine a specified term of an arithmetic sequence.
1	On Grade Level	**Lesson 11-2** A Formula for Arithmetic Sequences (p. 162)	A1: F-IF.B.5 A2: F-BF.A.2	• Develop an explicit formula for the nth term of an arithmetic sequence. • Use an explicit formula to find any term of an arithmetic sequence. • Write a formula for an arithmetic sequence given two terms or a graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 11-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 11-2 Practice (p. 165)	A1: F-IF.B.5 A2: F-BF.A.2	• Develop an explicit formula for the nth term of an arithmetic sequence. • Use an explicit formula to find any term of an arithmetic sequence. • Write a formula for an arithmetic sequence given two terms or a graph.
1	On Grade Level	**Lesson 11-3** Arithmetic Sequences as Functions (p. 166)	A1: F-IF.A.3 A1: F-IF.B.5 A2: F-BF.A.2	• Use function notation to write a general formula for the nth term of an arithmetic sequence. • Find any term of an arithmetic sequence written as a function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 11-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 11-3 Practice (p. 168)	A1: F-IF.A.3 A1: F-IF.B.5 A2: F-BF.A.2	• Use function notation to write a general formula for the nth term of an arithmetic sequence. • Find any term of an arithmetic sequence written as a function.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Lesson 11-4** Recursive Formula (p. 168)	■ A1: F-IF.A.3 A2: F-BF.A.2	• Write a recursive formula for a given arithmetic sequence. • Use a recursive formula to find the terms of an arithmetic sequence.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 11-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 11-4 Practice (p. 170)	■ A1: F-IF.A.3 A2: F-BF.A.2	• Write a recursive formula for a given arithmetic sequence. • Use a recursive formula to find the terms of an arithmetic sequence.
1	On Grade Level	**Activity 11 Practice** (p. 171)	■ A1: F-IF.A.3 ■ A1: F-IF.B.5 A2: F-BF.A.2	• Identify sequences that are arithmetic sequences. • Use the common difference to determine a specified term of an arithmetic sequence. • Develop an explicit formula for the nth term of an arithmetic sequence. • Use an explicit formula to find any term of an arithmetic sequence. • Write a formula for an arithmetic sequence given two terms or a graph. • Use function notation to write a general formula for the nth term of an arithmetic sequence. • Find any term of an arithmetic sequence written as a function. • Write a recursive formula for a given arithmetic sequence. • Use a recursive formula to find the terms of an arithmetic sequence.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 11**. (p. 618)	■ A1: F-IF.A.3 ■ A1: F-IF.B.5 A2: F-BF.A.2	• Identify sequences that are arithmetic sequences. • Use the common difference to determine a specified term of an arithmetic sequence. • Develop an explicit formula for the nth term of an arithmetic sequence. • Use an explicit formula to find any term of an arithmetic sequence. • Write a formula for an arithmetic sequence given two terms or a graph. • Use function notation to write a general formula for the nth term of an arithmetic sequence. • Find any term of an arithmetic sequence written as a function. • Write a recursive formula for a given arithmetic sequence. • Use a recursive formula to find the terms of an arithmetic sequence.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 2**–Linear Functions and Equations (p. 173)	■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: F-LE.A.2	Assessment Focus: • Modeling with tables, graphs and linear functions • Analyzing linear models
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**–Linear Functions and Equations (p. 618)	■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: F-LE.A.2	Assessment Focus: • Modeling with tables, graphs and linear functions • Analyzing linear models
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to arithmetic sequences • Sequences intro **Khan Academy Practice: Sequences**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 3**– Linear Models and Slope as Rate of Change (p. 207)	A1: F-IF.C.7 A1: F-LE.A.2 A1: F-LE.B.5	Assessment Focus: • Scatter plots • Linear regression • Line of best fit • Slope and domain • Comparing data
1	On Grade Level	**Lesson 12-1** Slope-Intercept Form (p. 175)	8.F.A.3 A1: A-REI.D.10 A1: F-LE.A.2	• Write the equation of a line in slope-intercept form. • Use slope-intercept form to solve problems.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 12-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 12-1 Practice (p. 178)	A1: A-REI.D.10 A1: F-LE.A.2	• Write the equation of a line in slope-intercept form. • Use slope-intercept form to solve problems.
	On Grade Level	**Mini-Lesson:** Slope-Intercept Form (p. I 53)	A1: F-LE.A.2	• Write linear equations in slope-intercept form.
1	On Grade Level	**Lesson 12-2** Point-Slope Form (p. 179)	A1: A-REI.D.10 A1: F-LE.A.2	• Write the equation of a line in point-slope form. • Use point-slope form to solve problems.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 12-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 12-2 Practice (p. 182)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Write the equation of a line in point-slope form. • Use point-slope form to solve problems.
	On Grade Level	**Mini-Lesson:** Point-Slope Form (p. I 54)	□ A1: F-LE.A.2	• Write linear equations in point-slope form.
		Mini-Lesson: Point-Slope Form Given Two Points (p. I 55)	□ A1: F-LE.A.2	• Write linear equations in point-slope form given two points.
1	On Grade Level	**Lesson 12-3** Standard Form (p. 183)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Write the equation of a line in standard form. • Use the standard form of a linear equation to solve problems.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 12-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 12-3 Practice (p. 186)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Write the equation of a line in standard form. • Use the standard form of a linear equation to solve problems.
	On Grade Level	**Mini-Lesson:** Standard Form (p. I 56)	□ A1: F-LE.A.2	• Write linear equations in standard form.
1	On Grade Level	**Lesson 12-4** Slopes of Parallel and Perpendicular Lines (p. 187)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Describe the relationship among the slopes of parallel lines and perpendicular lines. • Write an equation of a line that contains a given point and is parallel or perpendicular to a given line

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 12-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 12-4 Practice (p. 190)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Describe the relationship among the slopes of parallel lines and perpendicular lines. • Write an equation of a line that contains a given point and is parallel or perpendicular to a given line
1	On Grade Level	**Activity 12 Practice** (p. 191)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Write the equation of a line in slope-intercept form. • Use slope-intercept form to solve problems. • Write the equation of a line in point-slope form. • Use point-slope form to solve problems. • Write the equation of a line in standard form. • Use the standard form of a linear equation to solve problems. • Describe the relationship among the slopes of parallel lines and perpendicular lines. • Write an equation of a line that contains a given point and is parallel or perpendicular to a given line
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 12**. (p. 618)	■ A1: A-REI.D.10 □ A1: F-LE.A.2	• Write the equation of a line in slope-intercept form. • Use slope-intercept form to solve problems. • Write the equation of a line in point-slope form. • Use point-slope form to solve problems. • Write the equation of a line in standard form. • Use the standard form of a linear equation to solve problems. • Describe the relationship among the slopes of parallel lines and perpendicular lines. • Write an equation of a line that contains a given point and is parallel or perpendicular to a given line
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Modeling with linear equations: gym membership and lemonade • Graph from slope-intercept equation • Converting to slope-intercept form • Slope-intercept form from a table • Slope-intercept equation from graph • Graphing using intercepts • *x*-intercept of a line • Intercepts from a table • Slope-intercept equation from slope & point • Slope-intercept equation from two points • Writing linear equations in all forms **Khan Academy Practice: Linear equations, functions, & graphs**	
desmos			**Consider using Desmos Classroom Activity Marbleslides: Lines. Goals of this Activity:** Students will be able to: Restrict, reposition, and rotate lines at will using slope-intercept form • Use precision in describing these transformations using words and/or symbols	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 13-1** Scatter Plots and Trend Lines (p. 193)	■ A1: F-IF.B.4 □ A1: F-LE.A.2 □ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use collected data to make a scatter plot. • Determine the equation of a trend line.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 13-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 13-1 Practice (p. 196)	■ A1: F-IF.B.4 □ A1: F-LE.A.2 □ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use collected data to make a scatter plot. • Determine the equation of a trend line.
1	On Grade Level	**Lesson 13-2** Linear Regression (p. 197)	□ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use a linear model to make predictions. • Use technology to perform a linear regression
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 13-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 13-2 Practice (p. 199)	□ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use a linear model to make predictions. • Use technology to perform a linear regression
1	On Grade Level	**Lesson 13-3** Quadratic and Exponential Regressions (p. 200)	□ A1: S-ID.B.6	• Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 13-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 13-3 Practice (p. 204)	□ A1: S-ID.B.6	• Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.

Louisiana Algebra 1 Curriculum Map

ACTIVITY 13 | **Unit 2: Functions** | **Pacing: 87 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 13 Practice** (p. 205)	■ A1: F-IF.B.4 □ A1: F-LE.A.2 □ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use collected data to make a scatter plot. • Determine the equation of a trend line. • Use a linear model to make predictions. • Use technology to perform a linear regression • Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 13**. (p. 618)	■ A1: F-IF.B.4 □ A1: F-LE.A.2 □ A1: F-LE.B.5 □ A1: S-ID.B.6	• Use collected data to make a scatter plot. • Determine the equation of a trend line. • Use a linear model to make predictions. • Use technology to perform a linear regression • Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.
1	On Grade Level	**Embedded Assessment 3**– Linear Models and Slope as Rate of Change (p. 207)	□ A1: F-IF.C.7 □ A1: F-LE.A.2 □ A1: F-LE.B.5	Assessment Focus: • Scatter plots • Linear regression • Line of best fit • Slope and domain • Comparing data
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 3**–Linear Models and Slope as Rate of Change (p. 618)	□ A1: F-IF.C.7 □ A1: F-LE.A.2 □ A1: F-LE.B.5	Assessment Focus: • Scatter plots • Linear regression • Line of best fit • Slope and domain • Comparing data
1	On Grade Level	**End of Unit 2 Assessment** (SBD)*	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Constructing a scatter plot • Correlation and causality • Fitting a line to data • Comparing models to fit data • Estimating the line of best fit exercise • Interpreting a trend line **Khan Academy Practice: Describing relationships in quantitative data**	

** contains some enrichment*

ACTIVITY 14 | **Unit 3: Extensions of Linear Concepts** | **Pacing: 50 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**– Graphing Inequalities and Piecewise-Defined Functions (p. 249)	■ A1: A-REI.D.12 ■ A1: F-IF.A.2 □ A1: F-IF.C.7	Assessment Focus: • Linear inequalities • Piecewise functions • Graphing inequalities • Graphing piecewise functions
1	Remediation	Unit 3 **Getting Ready** (p. 210)	□ A1: F-LE.A.1 □ A1: F-LE.A.2 □ A1: F-IF.C.7 ■ A1: A-REI.D.12 6.EE.B.8	• Write and plot ordered pairs to determine if data is linear. • Write linear equations from data represented in a table. • Graph linear equations using the slope-intercept and x-and y-intercept methods. • Determine if ordered pairs represent solutions to linear inequalities. • Compare and contrast graphs of compound inequalities. • Use slope to determine if functions are linear or nonlinear.
		Linear Data (p. I 88)	□ A1: F-LE.A.1	• Write and plot ordered pairs to determine if data is linear.
		Writing an Equation for Data (p. I 91)	□ A1: F-LE.A.2	• Write linear equations from data represented in a table.
		Linear Relationships (p. I 93)	□ A1: F-LE.A.2	• Determine if an equation is linear.
		Graphing Linear Equations (p. I 99)	□ A1: F-IF.C.7	• Graph linear equations using the slope-intercept and x-and y-intercept methods.
		Solutions of Linear Inequalities in Two Variables (p. I 104)	■ A1: A-REI.D.12	• Determine if ordered pairs represent solutions to linear inequalities.
		Graphing Compound Inequalities (p. I 105)	6.EE.B.8	• Compare and contrast graphs of compound inequalities.
		Functions with a Constant Rate of Change (p. I 106)	□ A1: F-LE.A.1	• Use slope to determine if functions are linear or nonlinear.
1	On Grade Level	**Lesson 14-1** Function Notation and Rate of Change (p. 211)	■ A1: F-IF.A.2 ■ A1: F-IF.B.6	• Use function notation and interpret statements that use function notation in terms of a context. • Calculate the rate of change of a linear function presented in multiple representations.

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 14-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 14-1 Practice (p. 214)	■ A1: F-IF.A.2 ■ A1: F-IF.B.6	• Use function notation and interpret statements that use function notation in terms of a context. • Calculate the rate of change of a linear function presented in multiple representations.
1	On Grade Level	**Lesson 14-2** Writing Functions and Finding Domain and Range (p. 215)	■ A1: F-IF.A.2	• Write linear equations in two variables given a table of values, a graph, or a verbal description. • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 14-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 14-2 Practice (p. 218)	■ A1: F-IF.A.2	• Write linear equations in two variables given a table of values, a graph, or a verbal description. • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities.
1	On Grade Level	**Lesson 14-3** Evaluating Functions and Graphing Piecewise-Defined Linear Functions (p. 219)	■ A1: F-IF.A.2 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7b	• Evaluate a function at specific inputs within the function's domain. • Graph piecewise-defined functions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 14-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 14-3 Practice (p. 220)	■ A1: F-IF.A.2 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7b	• Evaluate a function at specific inputs within the function's domain. • Graph piecewise-defined functions.
1	On Grade Level	**Lesson 14-4** Comparing Functions (p. 221)	■ A1: F-IF.A.2 ■ A1: F-IF.B.6 □ A1: F-IF.C.7 □ A1: F-IF.C.9	• Compare the properties of two functions each represented in a different way.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 14-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 14-4 Practice (p. 224)	■ A1: F-IF.A.2 ■ A1: F-IF.B.6 □ A1: F-IF.C.7 □ A1: F-IF.C.9	• Compare the properties of two functions each represented in a different way.
1	On Grade Level	**Activity 14 Practice** (p. 225)	■ A1: F-IF.A.2 ■ A1: F-IF.B.5 ■ A1: F-IF.B.6 □ A1: F-IF.C.7 □ A1: F-IF.C.9	• Use function notation and interpret statements that use function notation in terms of a context. • Calculate the rate of change of a linear function presented in multiple representations. • Write linear equations in two variables given a table of values, a graph, or a verbal description. • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. • Evaluate a function at specific inputs within the function's domain • Graph piecewise-defined functions. • Compare the properties of two functions each represented in a different way.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 14.** (p. 618)	■ A1: F-IF.A.2 ■ A1: F-IF.B.5 ■ A1: F-IF.B.6 □ A1: F-IF.C.7 □ A1: F-IF.C.9	• Use function notation and interpret statements that use function notation in terms of a context. • Calculate the rate of change of a linear function presented in multiple representations. • Write linear equations in two variables given a table of values, a graph, or a verbal description. • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. • Evaluate a function at specific inputs within the function's domain • Graph piecewise-defined functions. • Compare the properties of two functions each represented in a different way.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Introduction to piecewise functions • Piecewise function graphs • Evaluate piecewise functions **Khan Academy Practice: Functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 15-1** Writing Equations from Graphs and Tables (p. 227)	■ A1: A-CED.A.2 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-LE.B.5	• Write a linear equation given a graph or a table. • Analyze key features of a function given its graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 15-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 15-1 Practice (p. 230)	■ A1: A-CED.A.2 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-LE.B.5	• Write a linear equation given a graph or a table. • Analyze key features of a function given its graph.
1	On Grade Level	**Lesson 15-2** Comparing Functions with Inequalities (p. 231)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-IF.C.9 □ A1: F-LE.B.5	• Graph and analyze functions on the same coordinate plane. • Write inequalities to represent real-world situations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 15-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 15-2 Practice (p. 234)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-IF.C.9 □ A1: F-LE.B.5	• Graph and analyze functions on the same coordinate plane. • Write inequalities to represent real-world situations.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 15-3** Writing Equations from Verbal Descriptions (p. 235)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-LE.B.5	• Write a linear equation given a verbal description. • Graph and analyze functions on the same coordinate plane.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 15-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 15-3 Practice (p. 236)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-LE.B.5	• Write a linear equation given a verbal description. • Graph and analyze functions on the same coordinate plane.
1	On Grade Level	**Activity 15 Practice** (p. 237)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-IF.C.9 □ A1: F-LE.B.5	• Write a linear equation given a graph or a table. • Analyze key features of a function given its graph. • Graph and analyze functions on the same coordinate plane. • Write inequalities to represent real-world situations. • Write a linear equation given a verbal description. • Graph and analyze functions on the same coordinate plane.

ACTIVITY 15 | **Unit 3: Extensions of Linear Concepts** | **Pacing: 50 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 15**. (p. 618)	■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.10 ■ A1: F-IF.B.4 ■ A1: F-IF.B.6 □ A1: F-IF.C.9 □ A1: F-LE.B.5	• Write a linear equation given a graph or a table. • Analyze key features of a function given its graph. • Graph and analyze functions on the same coordinate plane. • Write inequalities to represent real-world situations. • Write a linear equation given a verbal description. • Graph and analyze functions on the same coordinate plane.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Modeling with linear equations: snow • Two-step equation word problem: oranges • Graphing a linear equation: $y = 2x + 7$ • Linear graphs word problems • Linear function example: spending money **Khan Academy Practice: Functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 16-1** Writing and Graphing Inequalities in Two Variables (p. 239)	A1: A-CED.A.1 A1: A-CED.A.3 A1: A-REI.B.3 A1: A-REI.D.12	• Write linear inequalities in two variables. • Read and interpret the graph of the solutions of a linear inequality in two variables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 16-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 16-1 Practice (p. 241)	A1: A-CED.A.1 A1: A-CED.A.3 A1: A-REI.B.3 A1: A-REI.D.12	• Write linear inequalities in two variables. • Read and interpret the graph of the solutions of a linear inequality in two variables.
1	On Grade Level	**Lesson 16-2** Graphing Inequalities in Two Variables (p. 242)	A1: A-CED.A.1 A1: A-CED.A.3 A1: A-REI.B.3 A1: A-REI.D.12	• Graph on a coordinate plane the solutions of a linear inequality in two variables. • Interpret the graph of the solutions of a linear inequality in two variables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 16-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 16-2 Practice (p. 246)	A1: A-CED.A.1 A1: A-CED.A.3 A1: A-REI.B.3 A1: A-REI.D.12	• Graph on a coordinate plane the solutions of a linear inequality in two variables. • Interpret the graph of the solutions of a linear inequality in two variables.
1	On Grade Level	**Activity 16** Practice (p. 247)	A1: A-CED.A.1 A1: A-CED.A.3 A1: A-REI.B.3 A1: A-REI.D.12	• Write linear inequalities in two variables. • Read and interpret the graph of the solutions of a linear inequality in two variables. • Graph on a coordinate plane the solutions of a linear inequality in two variables. • Interpret the graph of the solutions of a linear inequality in two variables.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 16**. (p. 618)	■ A1: A-CED.A.1 ■ A1: A-CED.A.3 ■ A1: A-REI.B.3 ■ A1: A-REI.D.12	• Write linear inequalities in two variables. • Read and interpret the graph of the solutions of a linear inequality in two variables. • Graph on a coordinate plane the solutions of a linear inequality in two variables. • Interpret the graph of the solutions of a linear inequality in two variables.
1	On Grade Level	**Embedded Assessment 1**– Graphing Inequalities and Piecewise-Defined Functions (p. 249)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.12 ■ A1: F-IF.A.2 □ A1: F-IF.C.7	Assessment Focus: • Linear inequalities • Piecewise functions • Graphing inequalities • Graphing piecewise functions
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**– Graphing Inequalities and Piecewise-Defined Functions (p. 618)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: A-CED.A.3 ■ A1: A-REI.D.12 ■ A1: F-IF.A.2 □ A1: F-IF.C.7	Assessment Focus: • Linear inequalities • Piecewise functions • Graphing inequalities • Graphing piecewise functions
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to graphing two-variable inequalities • Solving and graphing linear inequalities **Khan Academy Practice: Two-variable inequalities**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2**– Systems of Equations and Inequalities (p. 283)	■ A1: A-CED.A.3 ○ A1: A-REI.C.6	Assessment Focus: • Systems of linear equations • Systems of linear inequalities
1	On Grade Level	**Lesson 17-1** The Graphing Method (p. 251)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations by graphing. • Interpret the solution of a system of linear equations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 17-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 17-1 Practice (p. 255)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations by graphing. • Interpret the solution of a system of linear equations.
	On Grade Level	**Mini-Lesson:** Using Graphing Calculators to Solve Systems of Equations (p. I 109)	○ A1: A-REI.C.6	• Explore systems of equations and their solutions using graphing calculators.
1	On Grade Level	**Lesson 17-2** Using Tables and the Substitution Method (p. 256)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations using a table or substitution. • Interpret the solution of a system of linear equations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 17-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 17-2 Practice (p. 260)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations using a table or substitution. • Interpret the solution of a system of linear equations.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 17-3** The Elimination Method (p. 261)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.5 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Use the elimination method to solve a system of linear equations. • Write a system of linear equations to model a situation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 17-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 17-3 Practice (p. 263)	8.EE.C.8 ■ A1: A-CED.A.3 ○ A1: A-REI.C.5 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Use the elimination method to solve a system of linear equations. • Write a system of linear equations to model a situation.
1	On Grade Level	**Lesson 17-4** Systems Without a Unique Solution (p. 264)	○ A1: A-REI.C.5 ○ A1: A-REI.C.6	• Explain when a system of linear equations has no solution. • Explain when a system of linear equations has infinitely many solutions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 17-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 17-4 Practice (p. 266)	○ A1: A-REI.C.5 ○ A1: A-REI.C.6	• Explain when a system of linear equations has no solution. • Explain when a system of linear equations has infinitely many solutions.
1	On Grade Level	**Lesson 17-5** Classifying Systems of Equations (p. 267)	○ A1: A-REI.C.5 ○ A1: A-REI.C.6	• Determine the number of solutions of a system of linear equations. • Classify a system of linear equations as independent or dependent and as consistent or inconsistent.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 17-5 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 17-5 Practice (p. 270)	○ A1: A-REI.C.5 ○ A1: A-REI.C.6	• Determine the number of solutions of a system of linear equations. • Classify a system of linear equations as independent or dependent and as consistent or inconsistent.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 17 Practice** (p. 271)	■ A1: A-CED.A.3 ○ A1: A-REI.C.5 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations by graphing • Interpret the solution of a system of linear equations • Solve a system of linear equations using a table or substitution • Interpret the solution of a system of linear equations • Use the elimination method to solve a system of linear equations • Write a system of linear equations to model a situation • Explain when a system of linear equations has no solution • Explain when a system of linear equations has infinitely many solutions • Determine the number of solutions of a system of linear equations • Classify a system of linear equations as independent or dependent and as consistent or inconsistent
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 17.** (p. 618)	■ A1: A-CED.A.3 ○ A1: A-REI.C.5 ○ A1: A-REI.C.6 ■ A1: A-REI.D.11	• Solve a system of linear equations by graphing • Interpret the solution of a system of linear equations • Solve a system of linear equations using a table or substitution • Interpret the solution of a system of linear equations • Use the elimination method to solve a system of linear equations • Write a system of linear equations to model a situation • Explain when a system of linear equations has no solution • Explain when a system of linear equations has infinitely many solutions • Determine the number of solutions of a system of linear equations • Classify a system of linear equations as independent or dependent and as consistent or inconsistent
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Systems of equations with graphing • Systems of equations with graphing: y = ⅞ x 5 & ⅗ x – 1 • Systems of equations with graphing: 5x + 3y = 7 & 3x – 2y = 8 • Systems of equations with graphing: chores • Systems of equations with substitution: y = –¼x + 100 & y = -¼x + 120 • Systems of equations with substitution: –3x – 4y = –2 & y = 2x – 5 • Systems of equations with elimination: TV & DVD • Systems of equations with elimination: 6x – 6y= –24 & –5x – 5y= –60 • Systems of equations number of solutions: fruit prices (1 of 2) • Systems of equations number of solutions: fruit prices (2 of 2) • Forming systems of equations with different numbers of solutions • Number of solutions to a system of equations graphically • Solutions to systems of equations: consistent vs. inconsistent • Solutions to systems of equations: dependent vs. independent **Khan Academy Practice: System of equations**	

ACTIVITY 18 | Unit 3: Extensions of Linear Concepts | Pacing: 50 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 18-1** Representing the Solution of a System of Inequalities (p. 273)	A1: A-CED.A.3 A1: A-REI.D.12	• Determine whether an ordered pair is a solution of a system of linear inequalities. • Graph the solutions of a system of linear inequalities.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 18-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 18-1 Practice (p. 277)	A1: A-CED.A.3 A1: A-REI.D.12	• Determine whether an ordered pair is a solution of a system of linear inequalities. • Graph the solutions of a system of linear inequalities.
1	On Grade Level	**Lesson 18-2** Interpreting the Solution of a System of Inequalities (p. 278)	A1: A-CED.A.3 A1: A-REI.D.12	• Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. • Interpret solutions of systems of linear inequalities.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 18-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 18-2 Practice (p. 280)	A1: A-CED.A.3 A1: A-REI.D.12	• Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. • Interpret solutions of systems of linear inequalities.
1	On Grade Level	**Activity 18 Practice** (p. 281)	A1: A-CED.A.3 A1: A-REI.D.12	• Determine whether an ordered pair is a solution of a system of linear inequalities. • Graph the solutions of a system of linear inequalities. • Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. • Interpret solutions of systems of linear inequalities.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 18.** (p. 618)	A1: A-CED.A.3 A1: A-REI.D.12	• Determine whether an ordered pair is a solution of a system of linear inequalities. • Graph the solutions of a system of linear inequalities. • Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. • Interpret solutions of systems of linear inequalities.

Key: Major Work, Supporting Work, Additional Work

ACTIVITY 18 | **Unit 3: Extensions of Linear Concepts** | **Pacing: 50 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 2**– Systems of Equations and Inequalities (p. 283)	■ A1: A-CED.A.3 ○ A1: A-REI.C.6	Assessment Focus: • Systems of linear equations • Systems of linear inequalities
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**– Systems of Equations and Inequalities (p. 618)	■ A1: A-CED.A.3 ○ A1: A-REI.C.6	Assessment Focus: • Systems of linear equations • Systems of linear inequalities
1	On Grade Level	**End of Unit 3 Assessment**	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Testing solutions to systems of inequalities • Intro to graphing systems of inequalities • Graphing systems of inequalities **Khan Academy Practice: Two-variable inequalities**	

ACTIVITY 19 | Unit 4: Exponents, Radicals, and Polynomials | Pacing: 88 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**– Exponents, Radicals, and Geometric Sequences (p. 323)	A2: N-RN.A.2 ■ A1: A-SSE.A.2 □ A1: A-SSE.B.3 ■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	Assessment Focus: • Properties of exponents • Integer exponents • Simplifying expressions involving exponents • Simplifying radical expressions • Performing operations with radical expressions • Distinguishing rational and irrational numbers • Identifying geometric sequences • Recursive and explicit formulas for geometric sequences • Finding a given term of a geometric sequence

ACTIVITY 19 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Remediation	Unit 4 **Getting Ready** (p. 286)	4.OA.B.4 6.NS.B.4 6.EE.A.1 6.EE.A.2 3.OA.B.5 8.F.B.4 A1: F-IF.C.7 6.RP.A.1 8.NS.A.1 7.NS.A.1b	• Find the greatest common factor of a pair of numbers. • Find the prime factorization of arithmetic and algebraic expressions. • Identify components of exponential expressions. • Use exponent to write equivalent expressions. • Evaluate arithmetic expressions using the distributive property. • Complete tables to create a linear representation. • Use graphs of linear equations to solve problems. • Write ratios to compare two quantities. • Classify real numbers as rationalor irrational. • Perform arithmetic operations on fractions and mixed numbers.
	Remediation	Factoring (p. I 126)	4.OA.B.4 6.NS.B.4	• Find the greatest common factor of a pair of numbers. • Find the prime factorization of arithmetic and algebraic expressions.
		Exponential Expressions (p. I 129)	6.EE.A.1 6.EE.A.2	• Identify components of exponential expressions. • Use exponent to write equivalent expressions.
		Distributive Property (p. I 130)	3.OA.B.5	• Evaluate arithmetic expressions using the distributive property.
		Linear Relationships in Tables (p. I 131)	8.F.B.4	• Complete tables to create a linear representation.
		Linear Equations and Their Graphs (p. I 132)	A1: F-IF.C.7	• Use graphs of linear equations to solve problems.
		Ratio (p. I 136)	6.RP.A.1	• Write ratios to compare two quantities.
		Real Numbers (p. I 140)	8.NS.A.1	• Classify real numbers as rational or irrational.
		Operations with Fractions (p. I 143)	7.NS.A.1b	• Perform arithmetic operations on fractions and mixed numbers.

ACTIVITY 19 | Unit 4: Exponents, Radicals, and Polynomials | Pacing: 88 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 19-1** Basic Exponent Properties (p. 287)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop basic exponent properties. • Simplify expressions involving exponents.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 19-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 19-1 Practice (p. 290)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop basic exponent properties. • Simplify expressions involving exponents.
1	On Grade Level	**Lesson 19-2** Negative and Zero Powers (p. 291)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.2	• Understand what is meant by negative and zero powers. • Simplify expressions involving exponents.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 19-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 19-2 Practice (p. 293)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.2	• Understand what is meant by negative and zero powers. • Simplify expressions involving exponents.
1	On Grade Level	**Lesson 19-3** Additional Properties of Exponents (p. 294)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. • Simplify expressions involving exponents.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 19-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 19-3 Practice (p. 296)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. • Simplify expressions involving exponents.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 19 Practice** (p. 297)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop basic exponent properties. • Simplify expressions involving exponents. • Understand what is meant by negative and zero powers. • Simplify expressions involving exponents. • Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. • Simplify expressions involving exponents.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 19**. (p. 618)	8.EE.A.1 A1: A-SSE.B.3c A2: N-RN.A.1 A2: N-RN.A.2	• Develop basic exponent properties. • Simplify expressions involving exponents. • Understand what is meant by negative and zero powers. • Simplify expressions involving exponents. • Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. • Simplify expressions involving exponents.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Exponent properties 1 • Exponent properties 2 • Thinking more about negative exponents • More negative exponent intuition • Exponent properties with parentheses **Khan Academy Practice: Exponential & logarithmic functions**	

ACTIVITY 20 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 20-1** Radical Expressions* (p. 299)	■ A1: A-SSE.A.2 A2: N-RN.A.2	• Write and simplify radical expressions. • Understand what is meant by a rational exponent.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 20-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 20-1 Practice (p. 303)	■ A1: A-SSE.A.2 A2: N-RN.A.2	• Write and simplify radical expressions. • Understand what is meant by a rational exponent.
	Remediation	**Mini-Lesson:** Using Prime Factorization to Simplify Square Roots (p. I 146)	8.NS.A.1	• Simplify square roots using prime factorization.
1	On Grade Level	**Lesson 20-2** Adding and Subtracting Radical Expressions (p. 304)	○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Add radical expressions. • Subtract radical expressions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 20-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 20-2 Practice (p. 306)	○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Add radical expressions. • Subtract radical expressions.
1	On Grade Level	**Lesson 20-3** Multiplying and Dividing Radical Expressions (p. 307)	○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 20-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 20-3 Practice (p. 310)	○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 20 Practice** (p. 311)	A2: N-RN.A.2 ○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Write and simplify radical expressions. • Understand what is meant by a rational exponent. • Add radical expressions. • Subtract radical expressions. • Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 20**. (p. 618)	A2: N-RN.A.2 ○ A1: N-RN.B.3 ■ A1: A-SSE.A.2	• Write and simplify radical expressions. • Understand what is meant by a rational exponent. • Add radical expressions. • Subtract radical expressions. • Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Simplifying radical expressions (subtraction) • Simplifying cube root expressions • Simplifying radical expressions: three variables **Khan Academy Practice: Exponential & logarithmic functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 21-1** Identifying Geometric Sequences (p. 313)	■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	• Identify geometric sequences and the common ratio in a geometric sequence. • Distinguish between arithmetic and geometric sequences.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 21-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 21-1 Practice (p. 315)	■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	• Identify geometric sequences and the common ratio in a geometric sequence. • Distinguish between arithmetic and geometric sequences.
1	On Grade Level	**Lesson 21-2** Formulas for Geometric Sequences* (p. 316)	■ A1: F-IF.A.3 A2: F-BF.A.2	• Write a recursive formula for a geometric sequence. • Write an explicit formula for a geometric sequence. • Use a formula to find a given term of a geometric sequence.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 21-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 21-2 Practice (p. 320)	■ A1: F-IF.A.3 A2: F-BF.A.2	• Write a recursive formula for a geometric sequence. • Write an explicit formula for a geometric sequence. • Use a formula to find a given term of a geometric sequence.
1	On Grade Level	**Activity 21 Practice** (p. 321)	■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	• Identify geometric sequences and the common ratio in a geometric sequence. • Distinguish between arithmetic and geometric sequences. • Write a recursive formula for a geometric sequence. • Write an explicit formula for a geometric sequence. • Use a formula to find a given term of a geometric sequence.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 21**. (p. 618)	■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	• Identify geometric sequences and the common ratio in a geometric sequence. • Distinguish between arithmetic and geometric sequences. • Write a recursive formula for a geometric sequence. • Write an explicit formula for a geometric sequence. • Use a formula to find a given term of a geometric sequence.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 1**– Exponents, Radicals, and Geometric Sequences (p. 323)	A2: N-RN.A.2 ■ A1: A-SSE.A.2 □ A1: A-SSE.B.3 ■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	Assessment Focus: • Properties of exponents • Integer exponents • Simplifying expressions involving exponents • Simplifying radical expressions • Performing operations with radical expressions • Distinguishing rational and irrational numbers • Identifying geometric sequences • Recursive and explicit formulas for geometric sequences • Finding a given term of a geometric sequence
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**– Exponents, Radicals, and Geometric Sequences (p. 618)	A2: N-RN.A.2 ■ A1: A-SSE.A.2 □ A1: A-SSE.B.3 ■ A1: F-IF.A.3 A2: F-BF.A.2 □ A1: F-LE.A.1	Assessment Focus: • Properties of exponents • Integer exponents • Simplifying expressions involving exponents • Simplifying radical expressions • Performing operations with radical expressions • Distinguishing rational and irrational numbers • Identifying geometric sequences • Recursive and explicit formulas for geometric sequences • Finding a given term of a geometric sequence
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to geometric sequences **Khan Academy Practice: Sequences**	

** contains some enrichment*

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2–** Exponential Functions (p. 353)	☐ A1: A-SSE.B.3 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-IF.C.7 ☐ A1: F-LE.B.5	Assessment Focus: • Exponential functions • Compound interest
1	On Grade Level	**Lesson 22-1** Exponential Functions and Exponential Growth (p. 325)	■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-IF.C.7	• Understand the definition of an exponential function. • Graph and analyze exponential growth functions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 22-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 22-1 Practice (p. 328)	■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-IF.C.7	• Understand the definition of an exponential function. • Graph and analyze exponential growth functions.
1	On Grade Level	**Lesson 22-2** Exponential Decay (p. 329)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-IF.C.7	• Describe characteristics of exponential decay functions. • Graph and analyze exponential decay functions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 22-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 22-2 Practice (p. 332)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-IF.C.7	• Describe characteristics of exponential decay functions. • Graph and analyze exponential decay functions.
1	On Grade Level	**Lesson 22-3** Graphs of Exponential Functions (p. 333)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 ☐ A1: F-LE.A.3	• Describe key features of graphs of exponential functions. • Compare graphs of exponential and linear functions.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 22-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 22-3 Practice (p. 338)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 □ A1: F-LE.A.3	• Describe key features of graphs of exponential functions. • Compare graphs of exponential and linear functions.
1	On Grade Level	**Activity 22 Practice** (p. 339)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-LE.A.3	• Understand the definition of an exponential function. • Graph and analyze exponential growth functions. • Describe characteristics of exponential decay functions. • Graph and analyze exponential decay functions. • Describe key features of graphs of exponential functions. • Compare graphs of exponential and linear functions.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 22**. (p. 618)	■ A1: A-CED.A.1 ■ A1: A-CED.A.2 ■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-LE.A.3	• Understand the definition of an exponential function. • Graph and analyze exponential growth functions. • Describe characteristics of exponential decay functions. • Graph and analyze exponential decay functions. • Describe key features of graphs of exponential functions. • Compare graphs of exponential and linear functions.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Exponential function graph • Intro to exponential functions • Linear vs. exponential growth • Writing exponential functions from tables **Khan Academy Practice: Exponential & logarithmic functions**	

ACTIVITY 23 | Unit 4: Exponents, Radicals, and Polynomials | Pacing: 88 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 23-1** Compound Interest (p. 341)	A1: A-SSE.B.3 A1: A-SSE.B.3c A1: A-CED.A.1	• Create an exponential function to model compound interest.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 23-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 23-1 Practice (p. 346)	A1: A-SSE.B.3 A1:: A-SSE.B.3c A1: A-CED.A.1	• Create an exponential function to model compound interest.
1	On Grade Level	**Lesson 23-2** Population Growth (p. 347)	A1: A-SSE.B.3 A1: A-CED.A.1 A2: S-ID.B.6	• Create an exponential function to fit population data. • Interpret values in an exponential function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 23-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 23-2 Practice (p. 350)	A1: A-SSE.B.3 A1: A-CED.A.1 A2: S-ID.B.6	• Create an exponential function to fit population data. • Interpret values in an exponential function.
1	On Grade Level	**Activity 23 Practice** (p. 351)	A1: A-SSE.B.3 A1: A-CED.A.1	• Create an exponential function to model compound interest. • Create an exponential function to fit population data. • Interpret values in an exponential function.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 23**. (p. 618)	A1: A-SSE.B.3 A1: A-CED.A.1	• Create an exponential function to model compound interest. • Create an exponential function to fit population data. • Interpret values in an exponential function.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 2**–Exponential Functions (p. 353)	A1: A-SSE.B.3 A1: A-CED.A.2 A1: F-IF.B.4 A1: F-IF.C.7 A1: F-LE.B.5	Assessment Focus: • Exponential functions • Compound interest
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**–Exponential Functions (p. 618)	A1: A-SSE.B.3 A1: A-CED.A.2 A1: F-IF.B.4 A1: F-IF.C.7 A1: F-LE.B.5	Assessment Focus: • Exponential functions • Compound interest
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Compound interest introduction • Exponential growth & decay word problems • Constructing exponential models • Modeling with basic exponential functions word problem **Khan Academy Practice: Exponential & logarithmic functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 3–** Polynomial Operations (p. 383)	A1: A-APR.A.1	Assessment Focus: • Adding polynomials • Multiplying polynomials
1	On Grade Level	**Lesson 24-1** Polynomial Terminology* (p. 355)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-APR.A.1	• Identify parts of a polynomial. • Identify the degree of a polynomial.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 24-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 24-1 Practice (p. 358)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-APR.A.1	• Identify parts of a polynomial. • Identify the degree of a polynomial.
1	On Grade Level	**Lesson 24-2** Adding Polynomials (p. 359)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use algebra tiles to add polynomials. • Add polynomials algebraically.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 24-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 24-2 Practice (p. 363)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use algebra tiles to add polynomials. • Add polynomials algebraically.
1	On Grade Level	**Lesson 24-3** Subtracting Polynomials (p. 364)	A1: A-SSE.A.1 A1: A-APR.A.1	• Subtract polynomials algebraically.

ACTIVITY 24 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 24-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 24-3 Practice (p. 366)	A1: A-SSE.A.1 A1: A-APR.A.1	• Subtract polynomials algebraically.
	On Grade Level	**Mini-Lesson:** Subtracting Polynomials using Algebra Tiles (p. I 147)	A1: A-APR.A.1	• Use algebra tiles to subtract polynomials.
1	On Grade Level	**Activity 24 Practice** (p. 367)	A1: A-SSE.A.1 A1: A-APR.A.1	• Identify parts of a polynomial. • Identify the degree of a polynomial. • Use algebra tiles to add polynomials. • Add polynomials algebraically. • Subtract polynomials algebraically.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 24**. (p. 618)	A1: A-SSE.A.1 A1: A-APR.A.1	• Identify parts of a polynomial. • Identify the degree of a polynomial. • Use algebra tiles to add polynomials. • Add polynomials algebraically. • Subtract polynomials algebraically.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: The parts of polynomial expressions • Adding polynomials • Subtracting polynomials • Subtracting polynomials: two variables • Subtracting polynomials with multiple variables **Khan Academy Practice: Polynomial expressions, equations, & functions**	

** contains some enrichment*

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 25-1** Multiplying Binomials (p. 369)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use a graphic organizer to multiply expressions. • Use the Distributive Property to multiply expressions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 25-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 25-1 Practice (p. 375)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use a graphic organizer to multiply expressions. • Use the Distributive Property to multiply expressions.
1	On Grade Level	**Lesson 25-2** Special Products of Binomials (p. 376)	A1: A-SSE.A.1 A1: A-APR.A.1	• Multiply binomials. • Find special products of binomials.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 25-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 25-2 Practice (p. 378)	A1: A-SSE.A.1 A1: A-APR.A.1	• Multiply binomials. • Find special products of binomials.
1	On Grade Level	**Lesson 25-3** Multiplying Polynomials (p. 379)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use a graphic organizer to multiply polynomials. • Use the Distributive Property to multiply polynomials.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 25-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 25-3 Practice (p. 380)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use a graphic organizer to multiply polynomials. • Use the Distributive Property to multiply polynomials.
1	On Grade Level	**Activity 25 Practice** (p. 381)	A1: A-SSE.A.1 A1: A-APR.A.1	• Use a graphic organizer to multiply expressions. • Use the Distributive Property to multiply expressions. • Multiply binomials. • Find special products of binomials. • Use a graphic organizer to multiply polynomials. • Use the Distributive Property to multiply polynomials.

ACTIVITY 25 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 25**. (p. 618)	■ A1: A-SSE.A.1 ■ A1: A-APR.A.1	• Use a graphic organizer to multiply expressions. • Use the Distributive Property to multiply expressions. • Multiply binomials. • Find special products of binomials. • Use a graphic organizer to multiply polynomials. • Use the Distributive Property to multiply polynomials.
1	On Grade Level	**Embedded Assessment 3**–Polynomial Operations (p. 383)	■ A1: A-APR.A.1	Assessment Focus: • Adding polynomials • Multiplying polynomials
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 3–** Polynomial Operations (p. 618)	■ A1: A-APR.A.1	Assessment Focus: • Adding polynomials • Multiplying polynomials
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Multiplying binomials by polynomials • Polynomial word problem: area of a window • Squaring binomials of the form $(ax + b)^2$ • Squaring a binomial • More examples of special products • Special products of the form $(ax + b)(ax - b)$ **Khan Academy Practice: Polynomial expressions, equations, & functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 4**: Factoring and Simplifying Rational Expressions (p. 419)	A1: A-SSE.A.1 A1: A-SSE.A.2 A2: A-APR.D.6 A2: A-APR.D.7 (+)	Assessment Focus: • Factoring perfect square trinomials • Factoring trinomials of the form $ax^2 + bx + c$ • Dividing polynomials • Expressing the remainder of polynomial division as a rational expression • Dividing rational expressions • Simplifying rational expressions
1	On Grade Level	**Lesson 26-1** Factoring by Greatest Common Factor (GCF) (p. 385)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-SSE.A.2	• Identify the GCF of the terms in a polynomial. • Factor the GCF from a polynomial.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 26-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 26-1 Practice (p. 387)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-SSE.A.2	• Identify the GCF of the terms in a polynomial. • Factor the GCF from a polynomial.
	Remediation	**Mini-Lesson**: Greatest Common Factor of Monomials (p. I 149)	6.NS.B.4	• Factor the GCF from polynomials.
1	On Grade Level	**Lesson 26-2** Factoring Special Products (p. 388)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Factor a perfect square trinomial. Factor a difference of two squares.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 26-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 26-2 Practice (p. 390)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Factor a perfect square trinomial. Factor a difference of two squares.
1	On Grade Level	**Activity 26 Practice** (p. 391)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Identify the GCF of the terms in a polynomial. • Factor the GCF from a polynomial. Factor a perfect square trinomial. Factor a difference of two squares.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 26**. (p. 618)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Identify the GCF of the terms in a polynomial. • Factor the GCF from a polynomial. Factor a perfect square trinomial. Factor a difference of two squares.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Factoring with the distributive property • Factoring polynomials: common factor • Solving quadratic equations by factoring • Factoring perfect squares **Khan Academy Practice: Polynomial expressions, equations, & functions**	

ACTIVITY 27 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 27-1** Factoring $x^2 + bx + c$ (p. 393)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Use algebra tiles to factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $x^2 + bx + c$.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 27-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 27-1 Practice (p. 397)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Use algebra tiles to factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $x^2 + bx + c$.
1	On Grade Level	**Lesson 27-2** Factoring $ax^2 + bx + c$ (p. 398)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-SSE.A.2	• Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 27-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 27-2 Practice (p. 400)	A1: A-SSE.A.1 A1: A-SSE.A.1a A1: A-SSE.A.2	• Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1.
1	On Grade Level	**Activity 27 Practice** (p. 401)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Use algebra tiles to factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 27**. (p. 618)	A1: A-SSE.A.1 A1: A-SSE.A.2	• Use algebra tiles to factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $x^2 + bx + c$. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1. • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: More examples of factoring quadratics as $(x + a)(x + b)$ • Factoring quadratics as $(x + a)(x + b)$ (example 2) • Factoring quadratics with common factor **Khan Academy Practice: Polynomial expressions, equations, & functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Lesson 28-1** Simplifying Rational Expressions (p. 403)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 28-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 28-1 Practice (p. 405)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors.
1	Enrichment	**Lesson 28-2** Dividing Polynomials (p. 406)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 28-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 28-2 Practice (p. 410)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression.
1	Enrichment	**Lesson 28-3** Multiplying and Dividing Rational Expressions (p. 411)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Multiply rational expressions. • Divide rational expressions.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 28-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 28-3 Practice (p. 412)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Multiply rational expressions. • Divide rational expressions.
	Remediation	**Mini-Lesson**: Dividing Out Common Factors (p. I 151)	6.NS.B.4	• Divide fractions and rational expressions.

ACTIVITY 27 | Unit 4: Exponents, Radicals, and Polynomials | Pacing: 88 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Lesson 28-4** Adding and Subtracting Rational Expressions (p. 413)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 28-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 28-4 Practice (p. 416)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions.
	Remediation	**Mini-Lesson**: Least Common Multiple (p. I 153)	6.NS.B.4	• Determine the least common multiple of pairs of numbers.
1	Enrichment	**Activity 28 Practice** (p. 417)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors. • Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression. • Multiply rational expressions. • Divide rational expressions. • Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions.
1	Enrichment	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 28**. (p. 618)	A2: A-APR.D.6 A2: A-APR.D.7 (+)	• Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors. • Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression. • Multiply rational expressions. • Divide rational expressions. • Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions.

ACTIVITY 28 | **Unit 4: Exponents, Radicals, and Polynomials** | **Pacing: 88 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 4**–Factoring and Simplifying Rational Expressions (p. 419)	■ A1: A-SSE.A.1 ■ A1: A-SSE.A.2 A2: A-APR.D.6 A2: A-APR.D.7 (+)	Assessment Focus: • Factoring perfect square trinomials • Factoring trinomials of the form $ax^2 + bx + c$ • Dividing polynomials • Expressing the remainder of polynomial division as a rational expression • Dividing rational expressions • Simplifying rational expressions
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 4**–Factoring and Simplifying Rational Expressions (p. 618)	■ A1: A-SSE.A.1 ■ A1: A-SSE.A.2 A2: A-APR.D.6 A2: A-APR.D.7 (+)	Assessment Focus: • Factoring perfect square trinomials • Factoring trinomials of the form $ax^2 + bx + c$ • Dividing polynomials • Expressing the remainder of polynomial division as a rational expression • Dividing rational expressions • Simplifying rational expressions
1	On Grade Level	**End of Unit 4 Assessment** (SBD)*	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to rational expression simplification **Khan Academy Practice: Rational expressions, equations, & functions**	

** contains some enrichment*

ACTIVITY 29 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**– Graphing Quadratic Functions (p. 453)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.9 □ A1: F-BF.A.1 ○ A1: F-BF.B.3	Assessment Focus: • Writing quadratic functions • Analyzing quadratic functions • Graphing quadratic functions • Transforming quadratic functions
1	On Grade Level	Unit 5 **Getting Ready** (p. 422)	■ A1: A-APR.A.1 ■ A1: A-SSE.A.2 ■ A1: F-IF.A.2 7.EE.B.4 □ A1: F-IF.C.7	• Use the distributive property to multiply polynomials. • Factor binomials and trinomials. • Substitute given input values to determine output values. • Use properties of equality to solve equations. • Use properties of inequality to solve inequalities. • Use graphs of linear equations to solve problems. • Model a real-world situation with a linear function.
	On Grade Level	Multiply Polynomial Expressions (p. I 183)	■ A1: A-APR.A.1	• Use the distributive property to multiply polynomials.
		Factoring Polynomial Expressions (p. I 185)	■ A1: A-SSE.A.2	• Factor binomials and trinomials.
		Evaluating Functions (p. I 189)	■ A1: F-IF.A.2	• Substitute given input values to determine output values.
		Solving Equations (p. I 190)	7.EE.B.4	• Use properties of equality to solve equations.
		Solving Inequalities (p. I 191)	7.EE.B.4	• Use properties of inequality to solve inequalities.
		Linear Equations and Their Graphs (p. I 192)	□ A1: F-IF.C.7	• Use graphs of linear equations to solve problems.
		Interpreting Graphs of Linear Functions (p. I 196)	□ A1: F-IF.C.7	• Model a real-world situation with a linear function.

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

Louisiana Algebra 1 Curriculum Map

ACTIVITY 29 | **Unit 5: Quadratic Functions** | **Pacing: 65 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 29-1** Modeling with a Quadratic Function (p. 423)	A1: F-IF.C.7 A1: F-BF.A.1	• Model a real-world situation with a quadratic function. • Identify quadratic functions. • Write a quadratic function in standard form.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 29-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 29-1 Practice (p. 426)	A1: F-IF.C.7 A1: F-BF.A.1	• Model a real-world situation with a quadratic function. • Identify quadratic functions. • Write a quadratic function in standard form.
	On Grade Level	**Mini-Lesson:** Identifying Quadratic Functions (p. I 197)	8.F.A.1	• Determine if functions are quadratic.
1	On Grade Level	**Lesson 29-2** Graphing and Analyzing a Quadratic Function (p. 427)	A1: F-IF.B.4 A1: F-IF.C.7 A1: F-IF.C.7a	• Graph a quadratic function. • Interpret key features of the graph of a quadratic function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 29-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 29-2 Practice (p. 430)	A1: F-IF.B.4 A1: F-IF.C.7 A1: F-IF.C.7a	• Graph a quadratic function. • Interpret key features of the graph of a quadratic function.
1	On Grade Level	**Activity 29 Practice** (p. 431)	A1: F-IF.B.4 A1: F-IF.C.7 A1: F-BF.A.1	• Model a real-world situation with a quadratic function. • Identify quadratic functions. • Write a quadratic function in standard form. • Graph a quadratic function. • Interpret key features of the graph of a quadratic function.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 29.** (p. 618)	A1: F-IF.B.4 A1: F-IF.C.7 A1: F-BF.A.1	• Model a real-world situation with a quadratic function. • Identify quadratic functions. • Write a quadratic function in standard form. • Graph a quadratic function. • Interpret key features of the graph of a quadratic function.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Graphing quadratics: standard form • Graphing quadratics: vertex form **Khan Academy Practice: Quadratic equations & functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 30-1** Translations of the Quadratic Parent Function (p. 433)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a ○ A1: F-BF.B.3	• Graph translations of the quadratic parent function. • Identify and distinguish among transformations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 30-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 30-1 Practice (p. 439)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.7a ○ A1: F-BF.B.3	• Graph translations of the quadratic parent function. • Identify and distinguish among transformations.
1	On Grade Level	**Lesson 30-2** Stretching and Shrinking the Quadratic Parent Function (p. 440)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 ○ A1: F-BF.B.3	• Graph vertical stretches and shrinks of the quadratic parent function. • Identify and distinguish among transformations.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 30-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 30-2 Practice (p. 443)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 ○ A1: F-BF.B.3	• Graph vertical stretches and shrinks of the quadratic parent function. • Identify and distinguish among transformations.
1	On Grade Level	**Lesson 30-3** Multiple Transformations of the Quadratic Parent Function (p. 444)	■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-IF.C.9 ○ A1: F-BF.B.3	• Graph reflections of the quadratic parent function. • Identify and distinguish among transformations. • Compare functions represented in different ways.

ACTIVITY 30 | **Unit 5: Quadratic Functions** | **Pacing: 65 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 30-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 30-3 Practice (p. 450)	■ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-IF.C.9 ○ A1: F-BF.B.3	• Graph reflections of the quadratic parent function. • Identify and distinguish among transformations. • Compare functions represented in different ways.
1	On Grade Level	**Activity 30 Practice** (p. 451)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.9 ○ A1: F-BF.B.3	• Graph translations of the quadratic parent function. • Identify and distinguish among transformations. • Graph vertical stretches and shrinks of the quadratic parent function. • Identify and distinguish among transformations. • Graph reflections of the quadratic parent function. • Identify and distinguish among transformations. • Compare functions represented in different ways.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 30.** (p. 618)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.9 ○ A1: F-BF.B.3	• Graph translations of the quadratic parent function. • Identify and distinguish among transformations. • Graph vertical stretches and shrinks of the quadratic parent function. • Identify and distinguish among transformations. • Graph reflections of the quadratic parent function. • Identify and distinguish among transformations. • Compare functions represented in different ways.
1	On Grade Level	**Embedded Assessment 1**– Graphing Quadratic Functions (p. 419)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.9 □ A1: F-BF.A.1 ○ A1: F-BF.B.3	Assessment Focus: • Writing quadratic functions • Analyzing quadratic functions • Graphing quadratic functions • Transforming quadratic functions

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

ACTIVITY 30 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**–Graphing Quadratic Functions (p. 618)	■ A1: F-IF.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.7 □ A1: F-IF.C.9 □ A1: F-BF.A.1 ○ A1:F-BF.B.3	Assessment Focus: • Writing quadratic functions • Analyzing quadratic functions • Graphing quadratic functions • Transforming quadratic functions
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Intro to parabola transformations • Forms & features of quadratic functions **Khan Academy Practice: Quadratic equations & functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2**–Solving Quadratic Equations (p. 493)	☐ A1: N-Q.A.3 ☐ A1: A-SSE.B.3 ■ A1: A-CED.A.1 ■ A1: A-REI.B.4 ■ A1: F-IF.B.5 ☐ A1: F-IF.C.8 ☐ A1: F-BF.A.1	Assessment Focus: • Solving quadratic equations by factoring • Solving quadratic equations by the square root method • Solving quadratic equations using the quadratic formula • Choosing a method to solve a quadratic equation • Writing the equation of a quadratic function to fit data • Using a quadratic model to solve problems • Interpreting solutions of a quadratic equation
1	On Grade Level	**Lesson 31-1** Solving by Graphing or Factoring (p. 455)	☐ A1: A-SSE.B.3 ☐ A1: A-SSE.B.3a ■ A1: A-REI.B.4 ■ A1: A-REI.B.4b	• Use a graph to solve a quadratic equation. • Use factoring to solve a quadratic equation. • Describe the connection between the zeros of a quadratic function and the *x*-intercepts of the function's graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 31-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 31-1 Practice (p. 458)	☐ A1: A-SSE.B.3 ☐ A1: A-SSE.B.3a ■ A1: A-REI.B.4 ■ A1: A-REI.B.4b	• Use a graph to solve a quadratic equation. • Use factoring to solve a quadratic equation. • Describe the connection between the zeros of a quadratic function and the *x*-intercepts of the function's graph.
1	On Grade Level	**Lesson 31-2** The Axis of Symmetry and the Vertex (p. 459)	☐ A1: A-APR.B.3 ☐ A1: A-SSE.B.3	• Identify the axis of symmetry of the graph of a quadratic function. • Identify the vertex of the graph of a quadratic function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 31-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 31-2 Practice (p. 461)	☐ A1: A-APR.B.3 ☐ A1: A-SSE.B.3	• Identify the axis of symmetry of the graph of a quadratic function. • Identify the vertex of the graph of a quadratic function.
1	On Grade Level	**Lesson 31-3** Graphing a Quadratic Function (p. 462)	☐ A1: A-APR.B.3 ☐ A1: A-SSE.B.3a ■ A1: F-IF.B.4	• Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. • Interpret the graph of a quadratic function.

ACTIVITY 31 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 31-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 31-3 Practice (p. 464)	A1: A-APR.B.3 A1: A-SSE.B.3a A1: F-IF.B.4	• Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. • Interpret the graph of a quadratic function.
1	On Grade Level	**Activity 31 Practice** (p. 465)	A1: A-APR.B.3 A1: A-SSE.B.3 A1: A-REI.B.4 A1: F-IF.B.4	• Use a graph to solve a quadratic equation. • Use factoring to solve a quadratic equation. • Describe the connection between the zeros of a quadratic function and the *x*-intercepts of the function's graph. • Identify the axis of symmetry of the graph of a quadratic function. • Identify the vertex of the graph of a quadratic function. • Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. • Interpret the graph of a quadratic function.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 31**. (p. 618)	A1: A-APR.B.3 A1: A-SSE.B.3 A1: A-REI.B.4 A1: F-IF.B.4	• Use a graph to solve a quadratic equation. • Use factoring to solve a quadratic equation. • Describe the connection between the zeros of a quadratic function and the *x*-intercepts of the function's graph. • Identify the axis of symmetry of the graph of a quadratic function. • Identify the vertex of the graph of a quadratic function. • Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. • Interpret the graph of a quadratic function.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Vertex & axis of symmetry of a parabola **Khan Academy Practice: Quadratic equations & functions**	

ACTIVITY 32 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 32-1** The Square Root Method (p. 467)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Solve quadratic equations by the square root method. • Provide examples of quadratic equations having a given number of real solutions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 32-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 32-1 Practice (p. 470)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Solve quadratic equations by the square root method. • Provide examples of quadratic equations having a given number of real solutions.
1	On Grade Level	**Lesson 32-2** Completing the Square (p. 471)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Solve quadratic equations by completing the square. • Complete the square to analyze a quadratic function.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 32-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 32-2 Practice (p. 473)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Solve quadratic equations by completing the square. • Complete the square to analyze a quadratic function.
	On Grade Level	**Mini-Lesson:** Using a Graphic Organizer to Complete the Square (p. I 198)	A1: A-REI.B.4	• Solve quadratic equations by completing the square.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 32-3** The Quadratic Formula (p. 474)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Derive the quadratic formula. • Solve quadratic equations using the quadratic formula.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 32-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 32-3 Practice (p. 476)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Derive the quadratic formula. • Solve quadratic equations using the quadratic formula.
	On Grade Level	**Mini-Lesson:** Simplifying Radicals (p. 1 200)	A1: A-REI.B.4b	• Express solutions to quadratic equations in simplest radical form.
1	On Grade Level	**Lesson 32-4** Choosing a Method and Using the Discriminant (p. 477)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Choose a method to solve a quadratic equation. • Use the discriminant to determine the number of real solutions of a quadratic equation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 32-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 32-4 Practice (p. 479)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: A-REI.B.4a A1: F-IF.C.8	• Choose a method to solve a quadratic equation. • Use the discriminant to determine the number of real solutions of a quadratic equation.
1	Enrichment	**Lesson 32-5** Complex Solutions (p. 480)	A1: A-SSE.B.3 A1: A-REI.B.4 A1: F-IF.C.8	• Use the imaginary unit *i* to write complex numbers. • Solve a quadratic equation that has complex solutions.

ACTIVITY 32 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 32-5 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 32-5 Practice (p. 482)	☐ A1: A-SSE.B.3 ■ A1: A-REI.B.4 ■ A1: A-REI.B.4b ☐ A1: F-IF.C.8	• Use the imaginary unit *i* to write complex numbers. • Solve a quadratic equation that has complex solutions.
1	On Grade Level	**Activity 32 Practice** (p. 483)	☐ A1: A-SSE.B.3 ■ A1: A-REI.B.4 ■ A1: A-REI.B.4b ☐ A1: F-IF.C.8	• Solve quadratic equations by the square root method. • Provide examples of quadratic equations having a given number of real solutions. • Solve quadratic equations by completing the square. • Complete the square to analyze a quadratic function. • Derive the quadratic formula. • Solve quadratic equations using the quadratic formula. • Choose a method to solve a quadratic equation. • Use the discriminant to determine the number of real solutions of a quadratic equation. • Use the imaginary unit *i* to write complex numbers. • Solve a quadratic equation that has complex solutions.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 32**. (p. 618)	☐ A1: A-SSE.B.3 ■ A1: A-REI.B.4 ☐ A1: F-IF.C.8	• Solve quadratic equations by the square root method. • Provide examples of quadratic equations having a given number of real solutions. • Solve quadratic equations by completing the square. • Complete the square to analyze a quadratic function. • Derive the quadratic formula. • Solve quadratic equations using the quadratic formula. • Choose a method to solve a quadratic equation. • Use the discriminant to determine the number of real solutions of a quadratic equation. • Use the imaginary unit *i* to write complex numbers. • Solve a quadratic equation that has complex solutions.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Solving quadratics by taking square roots: challenge • Completing the square • The quadratic formula • Discriminant review **Khan Academy Practice: Quadratic equations & functions**	

ACTIVITY 33 | **Unit 5: Quadratic Functions** | **Pacing: 65 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 33-1** Fitting Data with a Quadratic Function (p. 485)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 □ A1: F-BF.A.1 □ A1: S-ID.B.6	• Write a quadratic function to fit data. • Use a quadratic model to solve problems.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 33-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 33-1 Practice (p. 487)	■ A1: A-CED.A.1 ■ A1: F-IF.B.5 □ A1: F-BF.A.1	• Write a quadratic function to fit data. • Use a quadratic model to solve problems.
	On Grade Level	**Mini-Lesson**: Quadratic Regression (p. I 201)	□ A1: S-ID.B.6	• Use graphing calculators to write quadratic functions.
1	On Grade Level	**Lesson 33-2** Interpreting Solutions of Quadratic Equations (p. 488)	■ A1: A-REI.B.4 ■ A1: F-IF.B.5	• Solve quadratic equations. • Interpret the solutions of a quadratic equation in a real-world context.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 33-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 33-2 Practice (p. 490)	■ A1: A-REI.B.4 ■ A1: F-IF.B.5	• Solve quadratic equations. • Interpret the solutions of a quadratic equation in a real-world context.
	On Grade Level	**Mini-Lesson**: Solving a Quadratic Equation by Graphing (p. I 202)	□ A1: F-IF.C.7	• Use graphing calculators to solve quadratic equations.
1	On Grade Level	**Activity 33 Practice** (p. 491)	■ A1: A-CED.A.1 ■ A1: A-REI.B.4 ■ A1: F-IF.B.5 □ A1: F-BF.A.1	• Write a quadratic function to fit data. • Use a quadratic model to solve problems. • Solve quadratic equations. • Interpret the solutions of a quadratic equation in a real-world context.

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

ACTIVITY 33 | **Unit 5: Quadratic Functions** | **Pacing: 65 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 33**. (p. 618)	■ A1: A-CED.A.1 ■ A1: A-REI.B.4 ■ A1: F-IF.B.5 □ A1: F-BF.A.1	• Write a quadratic function to fit data. • Use a quadratic model to solve problems. • Solve quadratic equations. • Interpret the solutions of a quadratic equation in a real-world context.
1	On Grade Level	**Embedded Assessment 2**– Solving Quadratic Equations (p. 493)	□ A1: N-Q.A.3 □ A1: A-SSE.B.3 ■ A1: A-CED.A.1 ■ A1: A-REI.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.8 □ A1: F-BF.A.1	Assessment Focus: • Solving quadratic equations by factoring • Solving quadratic equations by the square root method • Solving quadratic equations using the quadratic formula • Choosing a method to solve a quadratic equation • Writing the equation of a quadratic function to fit data • Using a quadratic model to solve problems • Interpreting solutions of a quadratic equation
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**– Solving Quadratic Equations (p. 618)	□ A1: N-Q.A.3 □ A1: A-SSE.B.3 ■ A1: A-CED.A.1 ■ A1: A-REI.B.4 ■ A1: F-IF.B.5 □ A1: F-IF.C.8 □ A1: F-BF.A.1	Assessment Focus: • Solving quadratic equations by factoring • Solving quadratic equations by the square root method • Solving quadratic equations using the quadratic formula • Choosing a method to solve a quadratic equation • Writing the equation of a quadratic function to fit data • Using a quadratic model to solve problems • Interpreting solutions of a quadratic equation
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Comparing models to fit data example • Fitting quadratic and exponential functions to scatter plots **Khan Academy Practice: Quadratic equations & functions**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 3**–Solving Systems of Equations (p. 519)	A1: N-Q.A.3 A2: A-REI.C.7 A1: F-IF.B.5 A1: F-BF.A.1 A1: F-LE.A.3	Assessment Focus: • Identifying the type of function necessary to represent the value of items in a table • Graphing linear, quadratic, and exponential functions • Identifying the domain of a function • Identifying increasing and decreasing functions • Identifying the function with the greatest maximum value • Solving systems of equations
1	On Grade Level	**Lesson 34-1** Constructing Models (p. 495)	A1: F-IF.C.7 A1: F-IF.C.7a A1: F-IF.C.7c A1: F-IF.C.9 A1: F-BF.A.1	• Construct linear, quadratic, and exponential models for data. • Graph and interpret linear, quadratic, and exponential functions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 34-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 34-1 Practice (p. 499)	A1: F-IF.C.7 A1: F-IF.C.7a A1: F-IF.C.7c A1: F-IF.C.9 A1: F-BF.A.1	• Construct linear, quadratic, and exponential models for data. • Graph and interpret linear, quadratic, and exponential functions.
1	On Grade Level	**Lesson 34-2** Comparing Models (p. 500)	A1: F-IF.C.9 A1: F-BF.A.1 A1: F-BF.A.1b A1: F-LE.A.3	• Identify characteristics of linear, quadratic, and exponential functions. • Compare linear, quadratic, and exponential functions.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 34-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 34-2 Practice (p. 502)	A1: F-IF.C.9 A1: F-BF.A.1 A1: F-BF.A.1b A1: F-LE.A.3	• Identify characteristics of linear, quadratic, and exponential functions. • Compare linear, quadratic, and exponential functions.

ACTIVITY 34 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 34-3** Extending Models (p. 503)	A1: F-IF.C.7 A1: F-IF.C.7a A1: F-IF.C.7b A1: F-IF.C.9 A1: F-LE.A.3	• Compare piecewise-defined, linear, quadratic, and exponential functions. • Write a verbal description that matches a given graph.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 34-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 34-3 Practice (p. 506)	A1: F-IF.C.7 A1: F-IF.C.7a A1: F-IF.C.7b A1: F-IF.C.9 A1: F-LE.A.3	• Compare piecewise-defined, linear, quadratic, and exponential functions. • Write a verbal description that matches a given graph.
1	On Grade Level	**Activity 34 Practice** (p. 507)	A1: F-IF.C.7 A1: F-IF.C.9 A1: F-BF.A.1 A1: F-LE.A.3	• Construct linear, quadratic, and exponential models for data. • Graph and interpret linear, quadratic, and exponential functions. • Identify characteristics of linear, quadratic, and exponential functions. • Compare linear, quadratic, and exponential functions. • Compare piecewise-defined, linear, quadratic, and exponential functions. • Write a verbal description that matches a given graph.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 34**. (p. 618)	A1: F-IF.C.7 A1: F-IF.C.9 A1: F-BF.A.1 A1: F-LE.A.3	• Construct linear, quadratic, and exponential models for data. • Graph and interpret linear, quadratic, and exponential functions. • Identify characteristics of linear, quadratic, and exponential functions. • Compare linear, quadratic, and exponential functions. • Compare piecewise-defined, linear, quadratic, and exponential functions. • Write a verbal description that matches a given graph.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Comparing growth of exponential & quadratic models • Writing exponential functions from tables • Writing exponential functions from graphs **Khan Academy Practice: Functions**	

ACTIVITY 35 | **Unit 5: Quadratic Functions** | **Pacing: 65 (50-minute) class periods**

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Enrichment	**Lesson 35-1** Solving a System Graphically (p. 509)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9 □ A1: F-LE.A.3	• Write a function to model a real-world situation. • Solve a system of equations by graphing.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 35-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 35-1 Practice (p. 512)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9 □ A1: F-LE.A.3	• Write a function to model a real-world situation. • Solve a system of equations by graphing.
1	Enrichment	**Lesson 35-2** Solving a System Algebraically (p. 513)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9	• Write a system of equations to model a real-world situation. • Solve a system of equations algebraically.
1	Enrichment	**Formative Assessment, Differentiation, and Practice** 1. Lesson 35-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 35-2 Practice (p. 516)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9	• Write a system of equations to model a real-world situation. • Solve a system of equations algebraically.
1	Enrichment	**Activity 35 Practice** (p. 517)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9 □ A1: F-LE.A.3	• Write a function to model a real-world situation. • Solve a system of equations by graphing. • Write a system of equations to model a real-world situation. • Solve a system of equations algebraically.
1	Enrichment	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 35**. (p. 618)	A2: A-REI.C.7 ■ A1: A-REI.D.11 □ A1: F-IF.C.9 □ A1: F-LE.A.3	• Write a function to model a real-world situation. • Solve a system of equations by graphing. • Write a system of equations to model a real-world situation. • Solve a system of equations algebraically.

Key: ■ Major Work, □ Supporting Work, ○ Additional Work

ACTIVITY 35 | Unit 5: Quadratic Functions | Pacing: 65 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Embedded Assessment 3**– Solving Systems of Equations (p. 519)	☐ A1: N-Q.A.3 A2: A-REI.C.7 ■ A1: F-IF.B.5 ☐ A1: F-BF.A.1 ☐ A1: F-LE.A.3	Assessment Focus: • Identifying the type of function necessary to represent the value of items in a table • Graphing linear, quadratic, and exponential functions • Identifying the domain of a function • Identifying increasing and decreasing functions • Identifying the function with the greatest maximum value • Solving systems of equations
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 3**– Solving Systems of Equations (p. 618)	☐ A1: N-Q.A.3 A2: A-REI.C.7 ■ A1: F-IF.B.5 ☐ A1: F-BF.A.1 ☐ A1: F-LE.A.3	Assessment Focus: • Identifying the type of function necessary to represent the value of items in a table • Graphing linear, quadratic, and exponential functions • Identifying the domain of a function • Identifying increasing and decreasing functions • Identifying the function with the greatest maximum value • Solving systems of equations
1	On Grade Level	**End-of-Unit 5 Assessment** (SBD)*	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Quadratic systems: graphical solution • Quadratic systems: algebraic solution **Khan Academy Practice: System of equations**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 1**–Comparing Univariate Distributions (p. 557)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3	Assessment Focus: • Visual comparison of univariate graphical displays • Computational comparisons of center and spread • Computing specific measures of center and spread (including five-number summary) • Determining outliers • Creating modified box plots • Determining appropriate measures of variability

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	Remediation	Unit 6 **Getting Ready** (p. 522)	8.SP.A.2 8.F.B.4 8.SP.A.3 8.SP.A.4 6.SP.A.3 6.SP.B.5 6.SP.B.4 6.SP.A.2	• Write a linear equation to fit data represented in a scatter plot. • Interpret the slope of a trend line in relation to the variable quantities. • Complete two-way tables using addition and subtraction. • Use two-way tables to find the row or column percentage. • Find measures of central tendency for data sets. • Construct dot plot for sets of univariate data. • Describe the shape of data distributions shown in dot plots.
	Remediation	Estimating a Trend Line (p. I 227)	8.SP.A.2	• Write a linear equation to fit data represented in a scatter plot.
		Interpreting Slope in Context (p. I 229)	8.F.B.4 8.SP.A.3	• Interpret the slope of a trend line in relation to the variable quantities.
		Determining Missing Values in Two-Way Tables (p. I 230)	8.SP.A.4	• Complete two-way tables using addition and subtraction.
		Determining Row/Column Percentages in Two-Way Tables (p. I 232)	8.SP.A.4	• Use two-way tables to find the row or column percentage.
		Mean, Median, Mode (p. I 234)	6.SP.A.3 6.SP.B.5	• Find measures of central tendency for data sets.
		Constructing a Graph for Univariate Data (p. I 237)	6.SP.B.4	• Construct dot plot for sets of univariate data.
		The Shape of the Distribution of Data (p. I 238)	6.SP.A.2	• Describe the shape of data distributions shown in dot plots.
1	On Grade Level	**Lesson 36-1** Mean, Median, Mode, and MAD (p. 523)	○ A1: S-ID.A.2	• Interpret differences in center and spread of data in context. • Compare center and spread of two or more data sets. • Determine the mean absolute deviation of a set of data.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 36-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 36-2 Practice (p. 531)	A1: S-ID.A.2	• Interpret differences in center and spread of data in context. • Compare center and spread of two or more data sets. • Determine the mean absolute deviation of a set of data.
	On Grade Level	**Mini-Lesson**: Measures of Central Tendency (p. I 239)	A1: S-ID.A.2	• Determine mean, median, and mode of given data sets.
1	On Grade Level	**Lesson 36-2** Another Measure of Variability (p. 532)	A1: S-ID.A.2	• Use summation and subscript notation. • Calculate and interpret the standard deviation of a numerical data set. • Select appropriate measures of spread by examining the shape of a distribution.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 36-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 36-1 Practice (p. 535)	A1: S-ID.A.2	• Use summation and subscript notation. • Calculate and interpret the standard deviation of a numerical data set. • Select appropriate measures of spread by examining the shape of a distribution.
1	On Grade Level	**Activity 36 Practice** (p. 536)	A1: S-ID.A.2	• Interpret differences in center and spread of data in context. • Compare center and spread of two or more data sets. • Determine the mean absolute deviation of a set of data. • Use summation and subscript notation. • Calculate and interpret the standard deviation of a numerical data set. • Select appropriate measures of spread by examining the shape of a distribution.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 36**. (p. 618)	A1: S-ID.A.2	• Interpret differences in center and spread of data in context. • Compare center and spread of two or more data sets. • Determine the mean absolute deviation of a set of data. • Use summation and subscript notation. • Calculate and interpret the standard deviation of a numerical data set. • Select appropriate measures of spread by examining the shape of a distribution.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Statistics intro: Mean, median, & mode • Mean, median, & mode example • Comparing means of distributions • Means and medians of different distributions • Variance of a population **Khan Academy Practice: Displaying and describing data**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 37-1** Dot Plots and Box Plots (p. 537)	A1: S-ID.A.1 A1: S-ID.A.2	• Construct representations of univariate data in a real-world context. • Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. • Compare distributions, commenting on similarities and differences among them.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 37-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 37-1 Practice (p. 541)	A1: S-ID.A.1 A1: S-ID.A.2	• Construct representations of univariate data in a real-world context. • Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. • Compare distributions, commenting on similarities and differences among them.
1	On Grade Level	**Lesson 37-2** Modified Box Plots (p. 543)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3	• Use modified box plots to summarize data in a way that shows outliers. • Compare distributions, commenting on similarities and differences among them.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 37-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 37-2 Practice (p. 547)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3	• Use modified box plots to summarize data in a way that shows outliers. • Compare distributions, commenting on similarities and differences among them.
1	On Grade Level	**Lesson 37-3** Normally Distributed (p. 548)	A1: S-ID.A.1 A1: S-ID.A.2 A2: S-ID.A.4	• Use the mean and standard deviation to fit a normal distribution. • Develop an understanding of the normal distribution. • Use technology to estimate the percentages under the normal curve.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 37-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 37-3 Practice (p. 553)	A1: S-ID.A.1 A1: S-ID.A.2 A2: S-ID.A.4	• Use the mean and standard deviation to fit a normal distribution. • Develop an understanding of the normal distribution. • Use technology to estimate the percentages under the normal curve.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 37** Practice (p. 554)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3 A2: S-ID.A.4	• Construct representations of univariate data in a real-world context. • Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. • Compare distributions, commenting on similarities and differences among them. • Use modified box plots to summarize data in a way that shows outliers. • Compare distributions, commenting on similarities and differences among them. • Use the mean and standard deviation to fit a normal distribution. • Develop an understanding of the normal distribution. • Use technology to estimate the percentages under the normal curve.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 37**. (p. 618)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3 A2: S-ID.A.4	• Construct representations of univariate data in a real-world context. • Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. • Compare distributions, commenting on similarities and differences among them. • Use modified box plots to summarize data in a way that shows outliers. • Compare distributions, commenting on similarities and differences among them. • Use the mean and standard deviation to fit a normal distribution. • Develop an understanding of the normal distribution. • Use technology to estimate the percentages under the normal curve.
1	On Grade Level	**Embedded Assessment 1**–Comparing Univariate Distributions (p. 557)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3	Assessment Focus: • Visual comparison of univariate graphical displays • Computational comparisons of center and spread • Computing specific measures of center and spread (including five-number summary) • Determining outliers • Creating modified box plots • Determining appropriate measures of variability

ACTIVITY 37 | Unit 6: Probability and Statistics | Pacing: 44 (50-minute) class periods

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**–Comparing Univariate Distributions (p. 618)	A1: S-ID.A.1 A1: S-ID.A.2 A1: S-ID.A.3	Assessment Focus: • Visual comparison of univariate graphical displays • Computational comparisons of center and spread • Computing specific measures of center and spread (including five-number summary) • Determining outliers • Creating modified box plots • Determining appropriate measures of variability
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Reading box plots • Constructing a box plot • Range and mid-range • Introduction to the normal distribution **Khan Academy Practice: Displaying and describing data**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Unpack Embedded Assessment 2**–Bivariate Distributions (p. 609)	A1: S-ID.B.5 A1: S-ID.B.6 A1: S-ID.C.7 A1: S-ID.C.8	Assessment Focus: • Describing a bivariate numerical relationship and associating that description with a correlation coefficient • Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations • Reading a two-way table • Creating row percentages • Developing a segmented bar graph • Analyzing row percentages and segmented bar graphs to investigate association
1	On Grade Level	**Lesson 38-1** Scatter Plots (p. 559)	A1: S-ID.C.8	• Describe a linear relationship between two numerical variables in terms of direction and strength. • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 38-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 38-1 Practice (p. 563)	A1: S-ID.C.8	• Describe a linear relationship between two numerical variables in terms of direction and strength. • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables.
1	On Grade Level	**Lesson 38-2** Correlation Coefficient (p. 564)	A1: S-ID.C.8 A1: S-ID.C.9	• Calculate correlation. • Distinguish between correlation and causation.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 38-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 38-2 Practice (p. 567)	A1: S-ID.C.8 A1: S-ID.C.9	• Calculate correlation. • Distinguish between correlation and causation.
1	On Grade Level	**Activity 38** Practice (p. 569)	A1: S-ID.C.8 A1: S-ID.C.9	• Describe a linear relationship between two numerical variables in terms of direction and strength. • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables. • Calculate correlation. • Distinguish between correlation and causation.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 38**. (p. 618)	■ A1: S-ID.C.8 ■ A1: S-ID.C.9	• Describe a linear relationship between two numerical variables in terms of direction and strength. • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables. • Calculate correlation. • Distinguish between correlation and causation.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Constructung a scatter plot • Correlation and causality **Khan Academy Practice: Describing relationships in quantitative data**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 39-1** Line of Best Fit (p. 571)	A1: S-ID.B.6	• Describe the linear relationship between two numerical variables using the best-fit line. • Use the equation of the best-fit line to make predictions and compare the predictions to actual values.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 39-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 39-1 Practice (p. 576)	A1: S-ID.B.6	• Describe the linear relationship between two numerical variables using the best-fit line. • Use the equation of the best-fit line to make predictions and compare the predictions to actual values.
1	On Grade Level	**Lesson 39-2** Residuals (p. 577)	A1: S-ID.B.6	• Use technology to determine the equation of the best-fit line. • Describe the linear relationship between two numerical variables using the best-fit line. • Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 39-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 39-2 Practice (p. 581)	A1: S-ID.B.6	• Use technology to determine the equation of the best-fit line. • Describe the linear relationship between two numerical variables using the best-fit line. • Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables.
1	On Grade Level	**Lesson 39-3** Interpreting the Slope and Intercept of the Best-Fit Line (p. 582)	A1: S-ID.B.6 A1: S-ID.C.7	• Interpret the slope of the best-fit line in the context of the data. • Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 39-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 39-3 Practice (p. 587)	A1: S-ID.B.6 A1: S-ID.C.7	• Interpret the slope of the best-fit line in the context of the data. • Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear.
1	On Grade Level	**Lesson 39-4** Plotting Residuals (p. 588)	A1: S-ID.B.6	• Create a residual plot given a set of data and the equation of the best-fit line. • Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 39-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 39-4 Practice (p. 593)	A1: S-ID.B.6	• Create a residual plot given a set of data and the equation of the best-fit line. • Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables.

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Activity 39** Practice (p. 594)	A1: S-ID.B.6 A1: S-ID.C.7	• Describe the linear relationship between two numerical variables using the best-fit line. • Use the equation of the best-fit line to make predictions and compare the predictions to actual values. • Use technology to determine the equation of the best-fit line. • Describe the linear relationship between two numerical variables using the best-fit line. • Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables. • Interpret the slope of the best-fit line in the context of the data. • Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear. • Create a residual plot given a set of data and the equation of the best-fit line. • Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 39**. (p. 618)	A1: S-ID.B.6 A1: S-ID.C.7	• Describe the linear relationship between two numerical variables using the best-fit line. • Use the equation of the best-fit line to make predictions and compare the predictions to actual values. • Use technology to determine the equation of the best-fit line. • Describe the linear relationship between two numerical variables using the best-fit line. • Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables. • Interpret the slope of the best-fit line in the context of the data. • -Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear. • Create a residual plot given a set of data and the equation of the best-fit line. • Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables.
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Fitting a line to data • Estimating the line of best fit exercise • Comparing models to fit data example • Interpreting a trend line **Khan Academy Practice: Describing relationships in quantitative data**	

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	**Lesson 40-1** Bivariate Categorical Data (p. 595)	A1: S-ID.B.5	• Summarize bivariate categorical data in a two-way frequency table. • Interpret frequencies and relative frequencies in two-way tables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 40-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 40-1 Practice (p. 599)	A1: S-ID.B.5	• Summarize bivariate categorical data in a two-way frequency table. • Interpret frequencies and relative frequencies in two-way tables.
1	On Grade Level	**Lesson 40-2** Presenting Relative Frequency Data Graphically (p. 600)	A1: S-ID.B.5	• Interpret frequencies and relative frequencies in two-way tables. • Recognize and describe patterns of association in two-way tables.
1	On Grade Level	**Formative Assessment, Differentiation, and Practice** 1. Lesson 40-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 40-2 Practice (p. 606)	A1: S-ID.B.5	• Interpret frequencies and relative frequencies in two-way tables. • Recognize and describe patterns of association in two-way tables.
1	On Grade Level	**Activity 40** Practice	A1: S-ID.B.5	• Summarize bivariate categorical data in a two-way frequency table. • Interpret frequencies and relative frequencies in two-way tables. • Interpret frequencies and relative frequencies in two-way tables. • Recognize and describe patterns of association in two-way tables.
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 40**. (p. 618)	A1: S-ID.B.5	• Summarize bivariate categorical data in a two-way frequency table. • Interpret frequencies and relative frequencies in two-way tables. • Interpret frequencies and relative frequencies in two-way tables. • Recognize and describe patterns of association in two-way tables.
1	On Grade Level	**Embedded Assessment 2**– Bivariate Distributions (p. 557)	A1: S-ID.B.5 A1: S-ID.B.6 A1: S-ID.C.7 A1: S-ID.C.8	• Describing a bivariate numerical relationship and associating that description with a correlation coefficient • Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations • Reading a two-way table • Creating row percentages • Developing a segmented bar graph • Analyzing row percentages and segmented bar graphs to investigate association

Number of Periods	Action	Instructional Focus	Louisiana Student Standard(s)	Learning Targets or Assessment Focus
1	On Grade Level	Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 2**– Bivariate Distributions (p. 618)	□ A1: S-ID.B.5 □ A1: S-ID.B.6 ■ A1: S-ID.C.7 ■ A1: S-ID.C.8	Assessment Focus: • Describing a bivariate numerical relationship and associating that description with a correlation coefficient • Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations • Reading a two-way table • Creating row percentages • Developing a segmented bar graph • Analyzing row percentages and segmented bar graphs to investigate association
1	On Grade Level	**End-of-Unit 6 Assessment** (SBD)	*Assesses A1 standards covered in the unit.*	
KHANACADEMY			**Continue the Khan Academy Algebra Mission.** View Khan Academy Videos: Two-way frequency tables and Venn diagrams • Two-way relative frequency tables • Interpreting two way tables • Analyzing trends in categorical data **Khan Academy Practice: Describing relationships in quantitative data**	