## Sample Year-Long Schedule for Math Instruction SpringBoard Intensive Algebra I

The following sample schedule integrates the Intensive Algebra I Springboard curriculum, LEAP 360 Diagnostic and LEAP 360 Interim Assessments to allow teachers to move at a pace that best supports student learning. 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: DI-1 represents the Day of Instruction 1.
- Days of Instruction are based blocks of 90 to 100 minutes.
- To enable this course to be completed prior to the EOC, some Practice Activities are designated as Take Home Assignments (THA). As a result, there appear to be missing Days of Instruction in the calendar
- All On Grade Level and Remediation lessons, activities, and assessments are included in this calendar.
- Lessons and activities marked as "Enrichment" or "Optional" in the Springboard Curriculum Map have not been included in this calendar.

|  | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Week 1 | FLEX | DI-1 <br> Unpack <br> Assessment <br> Remediation | LEAP 360 <br> Diagnostic Assessment | DI-2 <br> Lesson 1-1 | DI-3 <br> Lesson 1-2 <br> THA Practice Activity 1 |
| Week 2 | DI -5 <br> Lesson 2-1 | DI-6 Lesson 2-2 | DI-7 <br> Lesson 2-3 | DI-8 <br> Lesson 2-4 | DI-9 <br> Lesson 2-5 <br> THA Practice <br> Activity 2 |
| Week 3 | DI-11 <br> Embedded Assessment | $\begin{aligned} & \text { DI-2 } \\ & \text { Lesson 3-1 } \end{aligned}$ | DI-13 <br> Lesson 3-2 | DI-14 <br> Lesson 3-3 <br> THA Practice <br> Activity 3 | DI-16 <br> Embedded <br> Assessment |
| Week 4 | DI-17 <br> End of Unit 1 <br> Assessment | DI-18 <br> Unpack <br> Assessment <br> Remediation | $\begin{aligned} & \text { DI-19 } \\ & \text { Lesson 5-1 } \end{aligned}$ | DI-20 <br> Lesson 5-2 | DI-21 <br> Lesson 5-3 |
| Week 5 | DI-22 <br> Practice Activity 5 | DI-23 <br> Lesson 6-1 | DI-24 Lesson 6-2 | DI-25 <br> Lesson 6-3 <br> THA Practice <br> Activity 6 | DI-27 <br> Lesson 7-1 |
| Week 6 | DI-28 Lesson 7-2 | DI-29 <br> Lesson 7-3 | DI-30 <br> Practice Activity 7 | DI-31 Lesson 8-1 | Di-32 <br> Lesson 8-2 <br> THA Practice <br> Activity 8 |
| Week 7 | DI-34 <br> Embedded Assessment | DI-35 <br> Lesson 9-1 | $\begin{aligned} & \text { DI-36 } \\ & \text { Lesson 9-2 } \end{aligned}$ | 1DI-37 <br> Lesson 9-3 | DI-38 <br> Practice Activity 9 |
| Week 8 | $\begin{aligned} & \text { DI-39 } \\ & \text { Lesson 10-1 } \end{aligned}$ | DI-40 Lesson 10-2 | DI-41 <br> Lesson 10-3 | DI-42 <br> Practice Activity 10 | DI-43 <br> Lesson 11-1 |
| Week 9 | DI-44 <br> Lesson 11-2 | DI-45 Lesson 11-3 | DI-46 <br> Practice Activity 11 | DI-47 <br> Embedded Assessment | DI-48 Unpack Assess Lesson 12-1 |
| Week 10 | $\begin{aligned} & \text { DI-49 } \\ & \text { Lesson 12-2 } \end{aligned}$ | $\begin{aligned} & \text { DI-50 } \\ & \text { Lesson 12-3 } \end{aligned}$ | $\begin{aligned} & \text { DI-51 } \\ & \text { Lesson 12-4 } \end{aligned}$ | DI-52 <br> Practice Activity 12 | DI-53 <br> Lesson 13-1 |
| Week 11 | DI-54 <br> Lesson 13-2 | DI-55 <br> Lesson 13-3 | DI-56 <br> Practice Activity 13 | DI-57 <br> Embedded Assessment | D-58 <br> End of Unit 2 <br> Assessment |


| Week 12 | DI-59 <br> Unpack Assessment Getting Ready | $\begin{aligned} & \text { DI-60 } \\ & \text { Lesson 14-1 } \end{aligned}$ | DI-61 <br> Lesson 14-2 | DI-62 <br> Lesson 14-3 | DI-63 <br> Lesson 14-4 <br> THA Practice <br> Activity 14 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Week 13 | DI-65 <br> Lesson 15-1 | $\begin{aligned} & \hline \text { DI-66 } \\ & \text { Lesson 15-2 } \end{aligned}$ | DI-67 <br> Lesson 15-3 | DI-68 <br> Practice Activity 15 | DI-69 <br> Lesson 16-1 |
| Week 14 | $\begin{aligned} & \text { DI-70 } \\ & \text { Lesson 16-2 } \end{aligned}$ | DI-71 <br> Practice Activity 16 | DI-72 <br> Embedded Assessment | DI-73 <br> Unpack Assessment <br> Lesson 17-1 | DI-74 <br> Lesson 17-2 |
| Week 15 | DI-75 <br> Lesson 7-3 | $\begin{aligned} & \hline \text { DI-76 } \\ & \text { Lesson 7-4 } \end{aligned}$ | DI-77 <br> Lesson 7-5 | $\begin{aligned} & \text { DI-78 } \\ & \text { Practice Activity } 17 \end{aligned}$ | DI-79 <br> Lesson 18-1 |
| Week 16 | $\begin{aligned} & \hline \text { DI-80 } \\ & \text { Lesson 18-2 } \end{aligned}$ | DI-81 <br> Practice Activity 18 | DI-82 <br> Embedded Assessment | DI-83 <br> End of Unit 3 Assessment | DI-84 <br> Unpack Assessment Getting Ready |
| Week 17 | LEAP 360 Interim Form 1 | $\begin{aligned} & \text { DI-85 } \\ & \text { Lesson 19-1 } \end{aligned}$ | DI-86 <br> Lesson 19-2 | $\begin{aligned} & \hline \text { DI-87 } \\ & \text { Lesson 19-3 } \end{aligned}$ | DI-88 <br> Practice Activity 19 |
| Week 18 | $\begin{aligned} & \text { DI-89 } \\ & \text { Lesson 20-1 } \end{aligned}$ | DI-90 <br> Lesson 20-2 | DI-91 <br> Lesson 20-3 | $\begin{aligned} & \text { DI-92 } \\ & \text { Practice Activity } 20 \end{aligned}$ | DI-93 <br> Lesson 21-1 |
|  |  |  |  |  |  |
| Week 19 | DI-94 <br> Lesson 21-2 | DI-95 <br> Practice Activity 21 | DI-96 <br> Embedded Assessment | DI-97 <br> Unpack Assess Lesson 22-1 | $\begin{aligned} & \text { DI-98 } \\ & \text { Lesson 22-2 } \end{aligned}$ |
| Week 20 | DI-99 <br> Lesson 22-3 | $\begin{aligned} & \text { DI-100 } \\ & \text { Practice Activity } 22 \end{aligned}$ | $\begin{aligned} & \text { DI-101 } \\ & \text { Lesson 23-1 } \end{aligned}$ | $\begin{aligned} & \text { DI-102 } \\ & \text { Lesson 23-2 } \end{aligned}$ | DI-103 <br> Practice Activity 23 |
| Week 21 | DI-104 <br> Embedded <br> Assessment | DI-105 <br> Unpack <br> Assessment <br> Lesson 24-1 | $\begin{aligned} & \text { DI-106 } \\ & \text { Lesson 24-2 } \end{aligned}$ | $\begin{aligned} & \text { DI-107 } \\ & \text { Lesson 24-3 } \end{aligned}$ | DI-108 <br> Practice Activity 24 |
| Week 22 | $\begin{aligned} & \text { DI-109 } \\ & \text { Lesson 25-1 } \end{aligned}$ | $\begin{aligned} & \text { DI-110 } \\ & \text { Lesson 25-2 } \end{aligned}$ | $\begin{aligned} & \text { D-111 } \\ & \text { Lesson 25-3 } \end{aligned}$ | DI-112 <br> Practice Activity 25 | DI-113 <br> Embedded Assessment |
| Week 23 | DI-114 <br> Unpack <br> Assessment <br> Lesson 26-1 | DI-115 <br> Lesson 26-2 <br> THA Practice Activity 26 | $\begin{aligned} & \text { DI-117 } \\ & \text { Lesson 27-1 } \end{aligned}$ | $\begin{aligned} & \text { DI-118 } \\ & \text { Lesson 27-2 } \end{aligned}$ | Practice Activity 27 |
| Week 24 | DI-120 <br> Embedded <br> Assessment | DI-121 <br> End of Unit 4 <br> Assessment | DI-122 <br> Unpack Assess Getting Ready | $\begin{aligned} & \text { DI-123 } \\ & \text { Lesson 29-1 } \end{aligned}$ | DI-124 <br> Lesson 29-2 <br> THA Practice <br> Activity 29 |
| Week 25 | $\begin{aligned} & \text { DI-126 } \\ & \text { Lesson 30-1 } \end{aligned}$ | $\begin{aligned} & \text { DI-127 } \\ & \text { Lesson 30-2 } \end{aligned}$ | $\begin{aligned} & \text { DI-128 } \\ & \text { Lesson 30-3 } \end{aligned}$ | $\begin{aligned} & \text { DI-129 } \\ & \text { Practice Activity } 30 \end{aligned}$ | DI-130 <br> Embedded Assessment |
| Week 26 | DI-131 Unpack Assess Lesson 31-1 | DI-132 <br> Lesson 31-2 | $\begin{aligned} & \text { DI-133 } \\ & \text { Lesson 31-3 } \end{aligned}$ | $\begin{aligned} & \text { DI-134 } \\ & \text { Practice Activity } 31 \end{aligned}$ | $\begin{aligned} & \text { DI-135 } \\ & \text { Lesson 32-1 } \end{aligned}$ |
| Week 27 | DI-136 <br> Lesson 32-2 | $\begin{aligned} & \text { DI-137 } \\ & \text { Lesson 32-3 } \end{aligned}$ | DI-138 <br> Lesson 32-4 <br> THA Practice <br> Activity 32 | LEAP 360 Interim Form 2 | DI-140 <br> Lesson 33-1 |
|  |  |  |  |  |  |
| Week 28 | DI-141 <br> Lesson 33-2 THA <br> Practice Activity 33 | DI-143 <br> Embedded Assessment | DI-144 <br> Lesson 34-1 | $\begin{aligned} & \text { DI-145 } \\ & \text { Lesson 34-2 } \end{aligned}$ | DI-146 <br> Lesson 34-3i THA <br> Practice Activity 34 |
| Week 29 | DI-148 <br> Embedded Assessment | DI-149 End of Unit 5 Assessment | DI-150 <br> Unpack Assess Getting Ready | $\begin{aligned} & \hline \text { DI-151 } \\ & \text { Lesson 36-1 } \end{aligned}$ | DI-152 <br> Lesson 36-2 THA Practice Activity 36 |
| Week 30 | $\begin{aligned} & \text { DI-154 } \\ & \text { Lesson 37-1 } \end{aligned}$ | $\begin{aligned} & \text { DI-155 } \\ & \text { Lesson 37-2 } \end{aligned}$ | DI-156 <br> Lesson 37-3 THA <br> Practice Activity 37 | DI-158 <br> Embedded <br> Assessment | LEAP Interim Form 3 (Optional) |


| Week 31 | DI-159 <br> Lesson 38-1 | DI-160 Lesson 38-2 THA Practice Activity 38 | DI-162 <br> Lesson 39-1 | DI-163 <br> Lesson 39-2 | DI-164 <br> Lesson 39-3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Week 32 | DI-165 <br> Lesson 39-4 <br> THA Practice <br> Activity 39 | $\begin{aligned} & \hline \text { DI-167 } \\ & \text { Lesson 40-1 } \end{aligned}$ | DI-168 Lesson 40-2 THA Practice Activity 40 | DI-170 Embedded Assessment | DI-171 <br> End of Unit 6 Assessment |
| Week 33 | Reserved for state testing (dateswill vary) |  |  |  |  |
| Week 34 |  |  |  |  |  |
| Week 35 |  |  |  |  |  |
| Week 36 |  |  |  |  |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 1

## Unit 1: Equations and Inequalities

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 1 | On Grade Level | Unpack Embedded Assessment 1-Patterns and Equations (p. 61) | $\square$ Al: N-Q.A. 1 | Assessment Focus: <br> - Identifying patterns <br> - Modeling patterns with expressions <br> - Using patterns to make predictions <br> - Writing, solving, and interpreting multi-step equations <br> - Solving literal equations for a variable |
|  |  |  | Al: A-CED.A. 1 |  |
|  |  |  | $\square$ Al: A-CED.A.. 4 |  |
|  |  |  | A1: A-REI.A. 1 |  |
|  |  |  | - Al: A-REI.B. 3 |  |
|  |  |  | $\square$ Al: F-LE.A.1b |  |
|  | Remediation | Unit 1 Getting Ready (p. 2) | Assesses prerequisite skills necessary for work in Unit 1. |  |
|  |  | Operations with Fractions (p. (1) 1) | - 8.EE.A. 1 | - Perform arithmetic operations on fractions and mixed numbers. |
|  |  | Exponents (p. (1) 4) | - 7.NS.A. 1 | - Simplify arithmetic expressions involving exponents. |
|  |  | Operations with Mixed Numbers (p. (1) 5) | - 7.NS.A. 3 | - Multiply and divide mixed numbers to solve real-world problems. |
|  |  | Integers (p. © 7) | - 7.NS.A. 3 | - Use number lines to locate integers. <br> - Compare and order integer expressions. |
|  |  | Decimals (p. (1) 11) | - 6.NS.B. 3 | - Perform arithmetic operations with decimals. |
|  |  | Solving One-Step Equations (p. (1) 14) | - 8.EE.C. 7 | - Solve one-step equations. |
|  |  | Simplifying Expressions (p. (1) 15) | - 7.EE.A.1 | - Simplify algebraic expressions using the distributive property. |
|  |  | Venn Diagrams (p. (1) 16) | 6.SP.B. 5 | - Use Venn diagrams to organize data. |
| 2 | On Grade Level | Lesson 1-1 Numeric and Graphic Representations of Data (p. 3) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 1-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 1-1 Practice (p. 7) | $\square \mathrm{Al}$ N-Q.A. 1 |  |
|  |  |  | $\square \mathrm{Al}$ : N-Q.A. 2 | - Identify patterns in data. |
|  |  |  | A1: A-SSE.A.la A2: F-BF.A. 2 | - Use tables, graphs, and expressions to model situations. <br> - Use expressions to make predictions. |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 1

| Day of Instruction | Level of Instruction | Instructional Focus |
| :---: | :---: | :---: |
|  |  | Lesson 1-2 Writing Expressions (p. 8) |
| 3 | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 1-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 1-2 Practice (p. 13) |

## Activity 1 Practice (p. 14)

- Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 1 (p. 618)


## Pacing: 17 class periods (90- to 100-minutes)

| Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: |
| $\square$ Al: N-Q.A. 1 | - Use patterns to write expressions. <br> - Use tables, graphs, and expressions to model situations. |
| $\square$ Al: N-Q.A. 2 |  |
| A1: A-SSE.A.la |  |
| A2: F-BF.A. 2 |  |
| $\square$ Al: N-Q.A. 1 | - Identify patterns in data. <br> - Use tables, graphs, and expressions to model situations. <br> - Use expressions to make predictions. <br> - Use patterns to write expressions. <br> - Use tables, graphs, and expressions to model situations. |
| $\square$ Al: N-Q.A. 2 |  |
| Al: A-SSE.A.la |  |
| A2: F-BF.A. 2 |  |

## 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: 17 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 5 | On Grade Level | Lesson 2-1 Writing and Solving Equations (p. 15) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 2-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 2-1 Practice (p. 18) | $\square$ Al: N-Q.A. 1 | - Use the algebraic method to solve an equation. <br> - Write and solve an equation to model a real-world situation. |
|  |  |  | $\square$ Al: N-Q.A. 2 |  |
|  |  |  | $\square$ Al: A-SSE.A.la |  |
|  |  |  | Al: A-CED.A..1 |  |
|  |  |  | A1: A-REI.A. 1 |  |
|  |  |  | $\square$ Al: A-REI.B. 3 |  |
|  |  | Mini-Lesson (optional): Solving Equations Using Algebra Tiles (p. (1) 18) | - 8.EE.C. 7 | - Use algebra tiles to solve equations. |
|  |  | Mini-Lesson (optional): Solving Equations Using Flow Charts (p. (1) 20) | - 8.EE.C. 7 | - Use flow charts to solve equations. |
| 6 | On Grade Level | Lesson 2-2 Equations with Variables on Both Sides (p. 19) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 2-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 2-2 Practice (p. 21) | $\square$ Al: N-Q.A. 1 | - Write and solve an equation to model a real-world situation. <br> - Interpret parts of an expression in terms of its context. |
|  |  |  | $\square$ Al: N-Q.A. 2 |  |
|  |  |  | Al: A-SSE.A.la |  |
|  |  |  | - A1: A-CED.A.. 1 |  |
|  |  |  | $\square$ Al: A-REI.A. 1 |  |
|  |  |  | - A1: A-REI.B. 3 |  |
|  |  | Mini-Lesson (optional): Properties of Real Numbers (p. (1) 22) | $\checkmark$ 7.NS.A.ld | - Identify properties of real numbers. |
|  |  |  | $\checkmark$ 7.NS.A.2c |  |
|  |  | Mini-Lesson (optional): Connect to Business—Profit, Revenue, and Cost (p. (1) 24) | - 8.EE.C. 7 | - Solve real-world problems related to business. |
| 7 | On Grade Level | Lesson 2-3 Solving More Complex Equations (p. 22) | Al: A-REI.A. 1 | - Solve complex equations with variables on both sides and justify each step in the solution process. <br> - Write and solve an equation to model a real-world situation. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 2-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 2-3 Practice (p. 24) | - Al: A-REI.B. 3 |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 2

## Unit 1: Equations and Inequalities

## Pacing: 17 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 8 | On Grade Level | Lesson 2-4 Equations with No Solution or Infinitely Many Solutions (p. 25) | Al: A-REI.A. 1 |  |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 2-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 2-4 Practice (p. 27) | Al: A-REI.B. 3 | - Identify equations that have no solution. <br> - Identify equations that have infinitely many solutions. |
| 9 | On Grade Level | Lesson 2-5 Solving Literal Equations for a Variable (p. 28) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 2-5 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 2-5 Practice (p. 30) | $\square$ Al: N-Q.A. 1 | - Solve literal equations for a specified variable. <br> - Use a formula that has been solved for a specified variable to determine an unknown quantity. |
|  |  |  | $\square$ Al: N-Q.A. 2 |  |
|  |  |  | $\square$ Al: A-SSE.A.1b |  |
|  |  |  | Al: A-CED.A.. 4 |  |
| 10 | On Grade Level | Activity 2 Practice (p. 31) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 2. (p. 618) | $\square$ Al: N-Q.A.l | - Use the algebraic method to solve an equation. <br> - Write and solve an equation to model a real-world situation. <br> - Write and solve an equation to model a real-world situation. <br> - Interpret parts of an expression in terms of its context. <br> - Solve complex equations with variables on both sides and justify each step in the solution process. <br> - Write and solve an equation to model a real-world situation. <br> - Identify equations that have no solution. <br> - Identify equations that have infinitely many solutions. <br> - Solve literal equations for a specified variable. <br> - Use a formula that has been solved for a specified variable to determine an unknown quantity. |
|  |  |  | $\square$ Al: N-Q.A. 2 |  |
|  |  |  | $\square \mathrm{Al}$ : A-SSE.A. 1 |  |
|  |  |  | - A1: A-CED.A..l |  |
|  |  |  | Al: A-CED.A.. 4 |  |
|  |  |  | Al: A-REI.A. 1 |  |
|  |  |  | A1: A-REI.B. 3 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 2

## Unit 1: Equations and Inequalities

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 11 | On Grade Level | Embedded Assessment 1-Patterns and Equations (p. 33) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1-Patterns and Equations (p. 618) <br> - Consider Unpacking Embedded Assessment 2Inequalities and Absolute Value (p. 61) during this time. | $\square$ Al: N-Q.A.1 | Assessment Focus: <br> - Identifying patterns <br> - Modeling patterns with expressions <br> - Using patterns to make predictions <br> - Writing, solving, and interpreting multi-step equations <br> - Solving literal equations for a variable |
|  |  |  | Al: A-CED.A.. 1 |  |
|  |  |  | $\square$ Al: A-CED.A.. 4 |  |
|  |  |  | - Al: A-REI.A. 1 |  |
|  |  |  | $\square$ Al: A-REI.B. 3 |  |
|  |  |  | $\square$ Al: F-LE.A.1b |  |
|  |  | KHANACADEMY | Continue the Khan Academ View Khan Academy Vid both sides: Variables on b intuition • One-step divisi equations • Simple equat One-step addition \& subtr intuition - Intro to equatio example: number of solut area - Solving an equatio Khan Academy Practice: S | Algebra Mission. <br> s: Same thing to both sides of equations - Why we do the same thing to <br> th sides • Representing a relationship with an equation • One-step equations <br> equation • One-step multiplication equations • One-step subtraction <br> ns: examples solving a variety of forms • Intro to two-step equations • <br> ction equations • Dividing both sides of an equation •Two-step equations <br> s with variables on both sides $\bullet$ Equations with parentheses •Worked <br> ns to equations - Number of solutions to equations - Manipulating formulas: <br> for a variable <br> ving basic equations \& inequalities |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 3
Unit 1: Equations and Inequalities

## Pacing: 17 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 12 | On Grade Level | Unpack Embedded Assessment 2-Inequalities and Absolute Value (p. 61) | Al: A-CED.A..1 $\square$ Al: A-CED.A.. 3 Al 1 A-REI.B. 3 | Assessment Focus: <br> - Writing, solving, and graphing inequalities <br> - Writing and graphing compound inequalities <br> - Solving and graphing absolute value inequalities |
|  | On Grade Level | Lesson 3-1 Inequalities and Their Solutions (p. 35) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 3-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 3-1 Practice (p. 37) | Al: A-CED.A..1 Al: A-CED.A.. 3 Al: A-REI.B. 3 | - Understand what is meant by a solution of an inequality. <br> - Graph solutions of inequalities on a number line. |
|  |  | Mini-Lesson (optional): Verifying Solutions to Inequalities (p. (1) 25) | A1: A-REI.B. 3 | - Determine and verify solutions to inequalities. |
| 13 | On Grade Level | Lesson 3-2 Solving Inequalities (p. 38) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 3-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 3-2 Practice (p. 42) | Al: A-CED.A.. 1 Al: A-CED.A. 3 Al: A-REI.B. 3 | - Write inequalities to represent real-world situations. <br> - Solve multi-step inequalities. |
| 14 | On Grade Level | Lesson 3-3 Compound Inequalities (p. 43) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 3-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 3-3 Practice (p. 46) | A1: A-REI.B. 3 | - Graph compound inequalities. <br> - Solve compound inequalities. |
| 15 | On Grade Level | Activity 3 Practice (p. 47) <br> Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 3. (p. 618) | Al: A-CED.A... 1 Al: A-CED.A.. 3 Al: A-REI.B. 3 | - Understand what is meant by a solution of an inequality. <br> - Graph solutions of inequalities on a number line. <br> - Write inequalities to represent real-world situations. <br> - Solve multi-step inequalities. <br> - Graph compound inequalities. <br> - Solve compound inequalities. |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: One-step inequality word problem • One-step inequality involving addition <br> - Inequalities using addition and subtraction $\bullet$ One-step inequalities examples $\bullet$ One-step inequalities: <br> $-5 c \leq 15 \bullet$ Two-step inequality word problems: apples $\bullet$ Two-step inequalities $\bullet$ Multi-step inequalities $\bullet$ <br> Compound inequalities examples <br> Khan Academy Practice: Solving basic equations \& inequalities |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 4

## Unit 1: Equations and Inequalities Pacing: 17 class periods (90- to 100-minutes)



* contains some enrichment


## Louisiana Algebra 1 Curriculum Map

ACTIVITY 5 Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 18 | On Grade Level | Unpack Embedded Assessment 1-Representations of Functions (p. 121) | $\square$ A1: F-IF.A. 1 | Assessment Focus: <br> - Functions, range and domain <br> - Graphs of functions and their key features <br> - Writing and using equations of functions <br> - Transforming functions |
|  |  |  | A1: F-IF.A. 2 |  |
|  |  |  | $\square \mathrm{Al}$ : F-IF.B. 4 |  |
|  |  |  | A1: F-IF.B. 5 |  |
|  |  |  | A1: F-BF.B. 3 |  |
|  | Remediation | Unit 2 Getting Ready (p. 64) | Assesses prerequisite skills necessary for work in Unit 2. |  |
|  |  | Pattems (p. (1) 38) | $\checkmark$ 4.OA.C. 5 | - Identify and extend patterns represented in a table. |
|  |  |  | - 5.OA.B. 3 |  |
|  |  | Inequalities (p. (1) 39) | -6.EE.B5 | - Graph inequalities on a number line and identify the integers in the solution set. |
|  |  | Evaluating Expressions (p. (1) 43) | - 6.EE.A. 2 | - Substitute given values into algebraic expressions, then simplify. |
|  |  | Coordinate Plane (p. (1) 44) | 6.NS.C. 8 | - Identify and plot ordered pairs on the coordinate plane. |
|  |  | Representing Data with an Equation (p. (1) 49) | 8.F.B. 4 | - Write equations for data given in a table. |
|  |  | Algebraic Equations (p. (1) 50) | - 7.EE.B.4a | - Write and solve linear equations. |
|  |  |  | - 8.EE.C.7b |  |
|  |  | Lesson 5-1 Relations and Functions (p. 65) | 8.F.A.1 |  |
| 19 | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 5-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 5-1 Practice (p. 70) | $\square$ Al: F-IF.A. 1 | - Represent relations and functions using tables, diagrams, and graphs. <br> - Identify relations that are functions. |
| 20 | On Grade Level | Lesson 5-2 Domain and Range (p. 71) | 8.F.A.1Al: F-IF.A.1 | - Describe the domain and range of a function. <br> - Find input-output pairs for a function. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 5-2 Short Cycle Assessment (SBD) |  |  |
|  |  | 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 5-2 Practice (p. 75) |  |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 5 Unit 2: Functions Pacing: 41 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 21 | On Grade Level | Lesson 5-3 Function Notation (p. 76) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 5-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 5-3 Practice (p. 78) | A1: F-IF.A. 1 <br> Al: F-IF.A. 2 | - Use and interpret function notation. <br> - Evaluate a function for specific values of the domain. |
| 22 | On Grade Level | Activity 5 Practice (p. 79) <br> - 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. <br> - Identify relations that are functions. <br> - Describe the domain and range of a function. <br> - Find input-output pairs for a function. <br> - Use and interpret function notation. <br> - Evaluate a function for specific values of the domain. |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: What is a function? •Relations and functions • Recognizing functions from verbal description $\bullet$ Domain and range of a function $\bullet$ What is the domain of a function? $\bullet$ What is the range of a function? <br> Khan Academy Practice: Functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 6 Unit 2: Functions Pacing: 41 class periods ( 90 - to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 23 | On Grade Level | Lesson 6-1 Key Features of Graphs (p. 81) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 6-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 6-1 Practice (p. 86) | Al: F-IF.B. 4 A1: F-IF.B. 5 | - Relate the domain and range of a function to its graph. <br> - Identify and interpret key features of graphs. |
| 24 | On Grade Level | Lesson 6-2 More Complex Graphs (p. 87) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 6-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 6-2 Practice (p. 91) | Al: F-IF.B. 4 Al: F-IF.B. 5 | - Relate the domain and range of a function to its graph and to its function rule. <br> - Identify and interpret key features of graphs. |
| 25 | On Grade Level | Lesson 6-3 Graphs of Real-World Situations (p. 92) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 6-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 6-3 Practice (p. 94) | $\square \mathrm{Al}:$ F-IF.B. 4 $\mathrm{Al}:$ F-IF..... 5 $\square \mathrm{Al}:$ F-IF.C. 7 | - Identify and interpret key features of graphs. <br> - Determine the reasonable domain and range for a real-world situation. |
| 26 | On Grade Level | Activity 6 Practice (p. 95) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 6. (p. 618) | Al: F-IF.B. 4 A1: F-IF.B. 5 $\square \mathrm{Al}$ : F-IF.C. 7 | - Relate the domain and range of a function to its graph. <br> - Identify and interpret key features of graphs. <br> - Relate the domain and range of a function to its graph and to its function rule. <br> - Identify and interpret key features of graphs. <br> - Identify and interpret key features of graphs. <br> - Determine the reasonable domain and range for a real-world situation. |
|  |  | KHNACADEMY | Continue the Khan Academy Algebra Mission. <br> 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 |  |

## Louisiana Algebra 1 Curriculum Map

ACtivity 7 Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 27 | On Grade Level | Lesson 7-1 The Spring Experiment (p. 97) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 7-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 7-1 Practice (p. 100) | A1: A-REI.D. 10 <br> Al: F-IF.B. 5 <br> A1: F-IF.C. 7 <br> A1: F-IF.C.7a | - Graph a function given a table. <br> - Write an equation for a function given a table or graph. |
| 28 | On Grade Level | Lesson 7-2 The Falling Object Experiment (p. 101) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 7-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 7-2 Practice (p. 104) |  | - Graph a function describing a real-world situation and identify and interpret key features of the graph. |
| 29 | On Grade Level | Lesson 7-3 The Radioactive Decay Experiment (p. 105) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 7-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 7-3 Practice (p. 108) |  | - Given a verbal description of a function, make a table and a graph of the function. <br> - Graph a function, and identify and interpret key features of the graph. |
| 30 | On Grade Level | Activity 7 Practice (p. 109) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 7. (p. 618) | A1: A-REI.D. 10 <br> A1: F-IF.B. 5 <br> A1: F-IF.C. 7 | - Graph a function given a table. <br> - Write an equation for a function given a table or graph. <br> - Graph a function describing a real-world situation and identify and interpret key features of the graph. <br> - Given a verbal description of a function, make a table and a graph of the function. <br> - Graph a function, and identify and interpret key features of the graph. |
|  |  | KHNACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Exponential function graph • Interpreting a graph example <br> Khan Academy Practice: Linear equations, functions, \& graphs |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 8 Unit 2: Functions Pacing: 41 class periods ( 90 - to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 31 | On Grade Level | Lesson 8-1 Exploring $f(x)+k^{*}$ (p. 111) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 8-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 8-1 Practice (p. 114) | A1: F-BF.B. 3 | - Identify the effect on the graph of replacing $f(x)$ by $f(x)+k$. <br> - Identify the transformation used to produce one graph from another. |
| 32 | On Grade Level | Lesson 8-2 Exploring $f(x+k)^{*}$ (p. 119) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 8-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 8-2 Practice (p. 118) | A1: F-BF.B. 3 | - Identify the effect on the graph of replacing $f(x)$ by $f(x+k)$. <br> - Identify the transformation used to produce one graph from another. |
| 33 | On Grade Level | Activity 8 Practice (p. 119) <br> - 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 $f(x)+k$. <br> - Identify the transformation used to produce one graph from another. <br> - Identify the effect on the graph of replacing $f(x)$ by $f(x+k)$. <br> - Identify the transformation used to produce one graph from another. |
| 34 | On Grade Level | Embedded Assessment 1-Representations of <br> Functions (p. 121) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment l-Representations of Functions (p. 618) <br> - Consider Unpacking Embedded Assessment 2Linear Functions and Equations (p. 173) during this time. |  | Assessment Focus: <br> - Functions, range, and domain <br> - Graphs of functions and their key features <br> - Writing and using equations of functions <br> - Transforming functions |
|  |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Shifting functions • Graphing shifted functions Khan Academy Practice: Functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 9 Unit 2: Functions Pacing: 41 class periods ( 90 - to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 35 | On Grade Level | Unpack Embedded Assessment 2-Linear Functions and Equations (p. 173) | A1: F-IF.B. 5 $\square$ Al............ F-BF. 1 $\square$ Al: F-LE...... 2 | Assessment Focus: <br> - Modeling with tables, graphs and linear functions <br> - Analyzing linear models |
|  | On Grade Level | Lesson 9-1 Slope (p. 123) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 9-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 9-1 Practice (p. 127) | A1: F-IF.B. 6 | - Determine the slope of a line from a graph. <br> - Develop and use the formula for slope. |
| 36 | On Grade Level | Lesson 9-2 Slope and Rate of Change (p. 128) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 9-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 9-2 Practice (p. 132) | A1: F-IF.B. 6 | - Calculate and interpret the rate of change for a function. <br> - Understand the connection between rate of change and slope. |
| 37 | On Grade Level | Lesson 9-3 More about Slopes (p. 133) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 9-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 9-3 Practice (p. 136) |  | - Show that a linear function has a constant rate of change. <br> - Understand when the slope of a line is positive, negative, zero, or undefined. <br> - Identify functions that do not have a constant rate of change and understand that these functions are not linear. |
| 38 | On Grade Level | Activity 9 Practice (p. 137) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 9. (p. 618) | A1: F-IF.B. 6 $\square$ A1: F-LE.A. 1 | - Determine the slope of a line from a graph. <br> - Develop and use the formula for slope. <br> - Calculate and interpret the rate of change for a function. <br> - Understand the connection between rate of change and slope. <br> - Show that a linear function has a constant rate of change. <br> - Understand when the slope of a line is positive, negative, zero, or undefined. <br> - Identify functions that do not have a constant rate of change and understand that these functions are not linear. |
| (1)HANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Worked example: slope from graph $\bullet \underline{\text { Positive } \& \text { negative slope } \bullet} \underline{\text { Slope }}$ (more examples) <br> Khan Academy Practice: Linear equations, functions, \& graphs |  |
|  |  | dos desmos | Consider using Desmos Classroom Activity Polygraph: Lines. Goals of this Activity: <br> Students will be able to: Identify important features of lines - Precisely describe these features to their peers • Increase their vocabulary relevant to lines |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 10

## Unit 2: Functions Pacing: 41 class periods ( 90 - to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 39 | On Grade Level | Lesson 10-1 Direct Variation (p. 139) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 10-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 10-1 Practice (p. 143) | $\square$ Al: A-CED.A. 1 | - Write and graph direct variation. <br> - Identify the constant of variation. |
|  |  |  | Al: F-IF.B. 5 |  |
|  |  |  | $\square$ A1: F-BF.A.1 |  |
|  |  |  | $\square$ Al: F-BF.A.la |  |
|  |  |  | $\square$ A1: F-LE.B. 5 |  |
| 40 | On Grade Level | Lesson 10-2 Indirect Variation (p. 144) | A1: A-CED.A. 1 |  |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 10-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 10-2 Practice (p. 147) | $\square$ Al: F-BF.A. 1 $\square$ Al: F-BF.A.1a | - Write and graph indirect variations. <br> - Distinguish between direct and indirect variation. |
| 41 | On Grade Level | Lesson 10-3 Another Linear Model (p. 148) | $\square$ Al: N-Q.A. 3 | - Write, graph, and analyze a linear model for a real-world situation. <br> - Interpret aspects of a model in terms of the real-world situation. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 10-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 10-3 Practice (p. 151) |  |  |
|  | Enrichment | Lesson 10-4 Inverse Functions (p. 152) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 10-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 10-4 Practice (p. 156) | $\square$ Al: A-CED.A. 1 | - Write the inverse function for a linear function. <br> - Determine the domain and range of an inverse function. |
|  |  |  | $\square \mathrm{Al}$ : F-IF.B. 5 |  |
|  |  |  | A2: F-BF.B.4a |  |
|  |  |  | A2: F-BF.B. 4 |  |
|  |  |  | $\square$ Al: F-LE.B. 5 |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 10

Unit 2: Functions
Pacing: 41 class periods ( 90 - to 100- minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 42 | On Grade <br> Level | Activity 10 Practice (p. 157) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 10. (p. 618) | $\square$ Al: N-Q.A. 3 | - Write and graph direct variation. <br> - Identify the constant of variation. <br> - Write and graph indirect variations. <br> - Distinguish between direct and indirect variation. <br> - Write, graph, and analyze a linear model for a real-world situation. <br> - Interpret aspects of a model in terms of the real-world situation. <br> - Write the inverse function for a linear function. <br> - Determine the domain and range of an inverse function. |
|  |  |  | $\square$ Al: A-CED.A. 1 |  |
|  |  |  | $\square$ Al: F-IF.B. 5 |  |
|  |  |  | $\square$ A1: F-BF.A. 1 |  |
|  |  |  | A2: F-BF.B. 4 |  |
|  |  |  | $\square$ Al: F-LE.B. 5 |  |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Intro to direct \& inverse variation • Direct variation word problem: space travel - Intro to inverse functions <br> Khan Academy Practice: Linear equations, functions, \& graphs |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 11

## Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 43 | On Grade <br> Level | Lesson 11-1 Identifying Arithmetic Sequences (p. 159) | A1: F-IF.B. 5 | - Identify sequences that are arithmetic sequences. <br> - Use the common difference to determine a specified term of an arithmetic sequence. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 11-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 11-1 Practice (p. 161) | A2: F-BF.A. 2 |  |
| 44 | On Grade Level | Lesson 11-2 A Formula for Arithmetic Sequences (p. 162) | A1: F-IF.B. 5 | - Develop an explicit formula for the nth term of an arithmetic sequence. <br> - Use an explicit formula to find any term of an arithmetic sequence. <br> - Write a formula for an arithmetic sequence given two terms or a graph. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 11-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 11-2 Practice (p. 165) | A2: F-BF.A. 2 |  |
| 45 | On Grade Level | Lesson 11-3 Arithmetic Sequences as Functions (p. 166) | A1: F-IF.A. 3 | - Use function notation to write a general formula for the nth term of an arithmetic sequence. <br> - Find any term of an arithmetic sequence written as a function. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 11-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 11-3 Practice (p. 168) | A1: F-IF.B. 5 A2: F-BF.A. 2 |  |
|  | Enrichment | Lesson 11-4 Recursive Formula (p. 168) | A1: F-IF.A. 3 | - Write a recursive formula for a given arithmetic sequence. <br> - Use a recursive formula to find the terms of an arithmetic sequence. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 11-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 11-4 Practice (p. 170) | A2: F-BF.A. 2 |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 11

Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 46 | On Grade Level | Activity 11 Practice (p. 171) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 11. (p. 618) | A1: F-IF.A. 3 <br> A1: F-IF.B. 5 <br> A2: F-BF.A. 2 | - Identify sequences that are arithmetic sequences. <br> - Use the common difference to determine a specified term of an arithmetic sequence. <br> - Develop an explicit formula for the nth term of an arithmetic sequence. <br> - Use an explicit formula to find any term of an arithmetic sequence. <br> - Write a formula for an arithmetic sequence given two terms or a graph. <br> - Use function notation to write a general formula for the nth term of an arithmetic sequence. <br> - Find any term of an arithmetic sequence written as a function. <br> - Write a recursive formula for a given arithmetic sequence. <br> - Use a recursive formula to find the terms of an arithmetic sequence. |
| 47 | On Grade Level | Embedded Assessment 2-Linear Functions and <br> Equations (p. 173) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2-Linear Functions and Equations (p. 618) <br> - Consider Unpacking Embedded Assessment 3Linear Models and Slope as Rate of Change (p. 207) during this time. | - A1: F-IF.B. 5 A1: F-BF.A. 1 Al: F-LE.A. 2 | Assessment Focus: <br> - Modeling with tables, graphs and linear functions <br> - Analyzing linear models |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Intro to arithmetic sequences • Sequences intro <br> Khan Academy Practice: Sequences |  |

## Louisiana Algebra 1 Curriculum Map

AстIVITY 12 Unit 2: Functions Pacing: 41 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 48 | On Grade Level | Unpack Embedded Assessment 3- <br> Linear Models and Slope as Rate of Change (p. 207) | Al: F-IF.C. 7 A1: F-LE.A. 2 A1: F-LE.B. 5 | Assessment Focus: <br> - Scatter plots <br> - Linear regression <br> - Line of best fit <br> - Slope and domain <br> - Comparing data |
|  | On Grade Level | Lesson 12-1 Slope-Intercept Form (p. 175) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 12-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 12-1 Practice (p. 178) | 8.F.A. 3 $\square$ A1: A-REI................................................................ $\square$ A1: F-LE.A. | - Write the equation of a line in slope-intercept form. <br> - Use slope-intercept form to solve problems. |
|  | On Grade Level | Mini-lesson (optional): Slope-Intercept Form (p. (1) 53) | $\square$ A1: F-LE.A. 2 | - Write linear equations in slope-intercept form. |
| 49 | On Grade Level | Lesson 12-2 Point-Slope Form (p. 179) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 12-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 12-2 Practice (p. 182) | Al: A-REI.D. 10 $\square$ Al: F-LE.A. 2 | - Write the equation of a line in point-slope form. <br> - Use point-slope form to solve problems. |
|  |  | Mini-lesson (optional): Point-Slope Form (p. (1) 54) | $\square$ A1: F-LE.A. 2 | - Write linear equations in point-slope form. |
|  | On Grade Level | Mini-lesson (optional): Point-Slope Form Given Two Points (p. (1) 55) | $\square$ A1: F-LE.A. 2 | - Write linear equations in point-slope form given two points. |
| 50 | On Grade Level | Lesson 12-3 Standard Form (p. 183) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 12-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 12-3 Practice (p. 186) | $\square$ Al: A-REI.D. 10 $\square$ Al: F-LE.A. 2 | - Write the equation of a line in standard form. <br> - Use the standard form of a linear equation to solve problems. |
|  | On Grade Level | Mini-lesson (optional): Standard Form (p. (1) 56) | $\square$ A1: F-LE.A. 2 | - Write linear equations in standard form. |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 12 Unit 2: Functions Pacing: 41 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 51 | On Grade Level | Lesson 12-4 Slopes of Parallel and Perpendicular Lines (p. 187) | $\square$ Al: A-REI.D. 10$\square$ Al 10 F-LE.A. 2 | - Describe the relationship among the slopes of parallel lines and perpendicular lines. <br> - Write an equation of a line that contains a given point and is parallel or perpendicular to a given line |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 12-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 12-4 Practice (p. 190) |  |  |
| 52 | On Grade Level | Activity 12 Practice (p. 191) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 12. (p. 618) | Al: A-REI.D. 10 $\square$ Al: F-LE.A. 2 | - Write the equation of a line in slope-intercept form. <br> - Use slope-intercept form to solve problems. <br> - Write the equation of a line in point-slope form. <br> - Use point-slope form to solve problems. <br> - Write the equation of a line in standard form. <br> - Use the standard form of a linear equation to solve problems. <br> - Describe the relationship among the slopes of parallel lines and perpendicular lines. <br> - Write an equation of a line that contains a given point and is parallel or perpendicular to a given line |
| 1)KHANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Modeling with linear equations: gym membership and lemonade • Graph from slope-intercept equation $\bullet$ Converting to slope-intercept form $\bullet$ Slope-intercept form from a table <br> - Slope-intercept equation from graph $\bullet$ Graphing using intercepts $\bullet x$-intercept of a line $\bullet$ Intercepts from a table $\bullet$ Slope-intercept equation from slope \& point $\bullet$ Slope-intercept equation from two points $\bullet$ Writing linear equations in all forms <br> Khan Academy Practice: Linear equations, functions, \& graphs |  |
|  |  |  | 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 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 13 Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 53 | On Grade Level | Lesson 13-1 Scatter Plots and Trend Lines (p. 193) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 13-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 13-1 Practice (p. 196) | A1: F-IF.B. 4 | - Use collected data to make a scatter plot. <br> - Determine the equation of a trend line. |
|  |  |  | $\square$ A1: F-LE.A. 2 |  |
|  |  |  | $\square$ Al: F-LE.B. 5 |  |
|  |  |  | $\square$ Al: S-ID.B. 6 |  |
| 54 | On Grade Level | Lesson 13-2 Linear Regression (p. 197) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 13-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 13-2 Practice (p. 199) | $\square$ Al: F-LE.B. 5 | - Use a linear model to make predictions. <br> - Use technology to perform a linear regression |
|  |  |  | $\square \mathrm{Al}$ : S-ID.B. 6 |  |
|  |  | Lesson 13-3 Quadratic and Exponential Regressions (p. 200) |  |  |
| 55 | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 13-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 13-3 Practice (p. 204) | $\square$ Al: S-ID.B. 6 | and then make predictions. <br> - Compare and contrast linear, quadratic, and exponential regressions. |
| 56 | On Grade Level | Activity 13 Practice (p. 205) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 13. (p. 618) | Al: F-IF.B. 4 | - Use collected data to make a scatter plot. <br> - Determine the equation of a trend line. <br> - Use a linear model to make predictions. <br> - Use technology to perform a linear regression <br> - Use technology to perform quadratic and exponential regressions, and then make predictions. <br> - Compare and contrast linear, quadratic, and exponential regressions. |
|  |  |  | $\square$ Al: F-LE.A. 2 |  |
|  |  |  | $\square$ Al: F-LE.B. 5 |  |
|  |  |  | $\square \mathrm{Al}$ : S-ID.B. 6 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY Unit 2: Functions Pacing: 41 class periods (90-to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 57 | On Grade Level | Embedded Assessment 3- <br> Linear Models and Slope as Rate of Change (p. 207) <br> - 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) <br> - Consider Unpacking Embedded Assessment 1Graphing Inequalities and Piecewise-Defined Functions (p. 249) during this time. | Al: F-IF.C. 7 A1: F-LE.A. 2 A1: F-LE.B. 5 | Assessment Focus: <br> - Scatter plots <br> - Linear regression <br> - Line of best fit <br> - Slope and domain <br> - Comparing data |
| 58 | On Grade Level | End of Unit 2 Assessment (SBD)* | Assesses Al standards covered in the unit. |  |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Constructing a scatter plot - Correlation and causality • Fitting a line to data $\cdot$ Comparing models to fit data $\cdot$ Estimating the line of best fit exercise $\bullet$ Interpreting a trend line Khan Academy Practice: Describing relationships in quantitative data |  |

* contains some enrichment


## Louisiana Algebra 1 Curriculum Map

ACTIVITY 14
Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 59 | On Grade Level | Unpack Embedded Assessment 1- Graphing Inequalities and Piecewise-Defined Functions (p. 249) | A1: A-REI.D. 12 <br> A1: F-IF.A. 2 <br> A1: F-IF.C. 7 | Assessment Focus: <br> - Linear inequalities <br> - Piecewise functions <br> - Graphing inequalities <br> - Graphing piecewise functions |
|  | Remediation | Unit 3 Getting Ready (p. 210) | Assesses prerequisite skills necessary for work in Unit 3. |  |
|  |  | Linear Data (p. (1) 88) | $\square$ Al: F-LE.A. 1 | - Write and plot ordered pairs to determine if data is linear. |
|  |  | Writing an Equation for Data (p. (1) 91) | $\square$ A1: F-LE.A. 2 | - Write linear equations from data represented in a table. |
|  |  | Linear Relationships (p. (1) 93) | $\square$ Al: F-LE.A. 2 | - Determine if an equation is linear. |
|  |  | Graphing Linear Equations (p. (1) 99) | $\square$ 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 $\vdots \text { (p. (1) 104) }$ | Al: A-REI.D. 12 | - Determine if ordered pairs represent solutions to linear inequalities. |
|  |  | Graphing Compound Inequalities (p. (1) 105) | -6.EE.B. 8 | - Compare and contrast graphs of compound inequalities. |
|  |  | Functions with a Constant Rate of Change (p. (1) 106) | $\square$ Al: F-LE.A. 1 | - Use slope to determine if functions are linear or nonlinear. |
| 60 | On Grade Level | Lesson 14-1 Function Notation and Rate of Change (p. 211) | A1: F-IF.A. 2 |  |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 14-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 14-1 Practice (p. 214) | A1: F-IF.B. 6 | notation in terms of a context. <br> - Calculate the rate of change of a linear function presented in multiple representations. |
| 61 | On Grade Level | Lesson 14-2 Writing Functions and Finding Domain and Range (p. 215) |  | - Write linear equations in two variables given a table of values, a graph, or a verbal description. <br> - Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 14-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 14-2 Practice (p. 218) | $\square$ Al: F-IF.A. 2 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 14
Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 62 | On Grade Level | Lesson 14-3 Evaluating Functions and Graphing Piecewise-Defined Linear Functions (p. 219) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 14-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 14-3 Practice (p. 220) | $\square$ A1: F-IF.A. 2 Al: F-IF.B. 5 $\square$ A1: F-IF...... $\square$ Al: F-IF......... $\square$ | - Evaluate a function at specific inputs within the function's domain. <br> - Graph piecewise-defined functions. |
| 63 | On Grade Level | Lesson 14-4 Comparing Functions (p. 221) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 14-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 14-4 Practice (p. 224) | A1: F-IF.A. 2 Al: F-IF.B. 6 Al: F-IF.C. 7 Al: F-IF.C. 9 | - Compare the properties of two functions each represented in a different way. |
| 64 | On Grade Level | Activity 14 Practice (p. 225) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 14. (p. 618) |  | - Use function notation and interpret statements that use function notation in terms of a context. <br> - Calculate the rate of change of a linear function presented in multiple representations. <br> - Write linear equations in two variables given a table of values, a graph, or a verbal description. <br> - Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. <br> - Evaluate a function at specific inputs within the function's domain <br> - Graph piecewise-defined functions. <br> - Compare the properties of two functions each represented in a different way. |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Introduction to piecewise functions • Piecewise function graphs • Evaluate piecewise functions <br> Khan Academy Practice: Functions |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 15

## Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 65 | On Grade Level | Lesson 15-1 Writing Equations from Graphs and Tables (p. 227) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 15-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 15-1 Practice (p. 230) |  | - Write a linear equation given a graph or a table. <br> - Analyze key features of a function given its graph. |
| 66 | On Grade Level | Lesson 15-2 Comparing Functions with Inequalities (p. 231) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 15-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 15-2 Practice (p. 234) |  | - Graph and analyze functions on the same coordinate plane. <br> - Write inequalities to represent real-world situations. |
| 67 | On Grade Level | Lesson 15-3 Writing Equations from Verbal <br> Descriptions (p. 235) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 15-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 15-3 Practice (p. 236) |  | - Write a linear equation given a verbal description. <br> - Graph and analyze functions on the same coordinate plane. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 15

Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 68 | On Grade Level | Activity 15 Practice (p. 237) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 15. (p. 618) | A1: A-CED.A. 2 | - Write a linear equation given a graph or a table. <br> - Analyze key features of a function given its graph. <br> - Graph and analyze functions on the same coordinate plane. <br> - Write inequalities to represent real-world situations. <br> - Write a linear equation given a verbal description. <br> - Graph and analyze functions on the same coordinate plane. |
|  |  |  | - Al: A-CED.A. 3 |  |
|  |  |  | $\square$ Al: A-REI.D. 10 |  |
|  |  |  | $\square$ Al: F-IF.B. 4 |  |
|  |  |  | $\square$ Al: F-IF.B. 6 |  |
|  |  |  | $\square$ Al: F-IF.C. 9 |  |
|  |  |  | $\square$ Al: F-LE.B. 5 |  |
|  |  | KHANACADEMY | Continue the Khan Academ View Khan Academy Vide oranges • Graphing a linea example: spending money Khan Academy Practice: Fu | Algebra Mission. <br> s: Modeling with linear equations: snow •Two-step equation word problem: r equation: $y=2 x+7 \cdot$ Linear graphs word problems $\bullet$ Linear function <br> nctions |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 16

## Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 69 | On Grade Level | Lesson 16-1 Writing and Graphing Inequalities in Two Variables (p. 239) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 16-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 16-1 Practice (p. 241) |  | - Write linear inequalities in two variables. <br> - Read and interpret the graph of the solutions of a linear inequality in two variables. |
| 70 | On Grade Level | Lesson 16-2 Graphing Inequalities in Two Variables (p. 242) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 16-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 16-2 Practice (p. 246) |  | - Graph on a coordinate plane the solutions of a linear inequality in two variables. <br> - Interpret the graph of the solutions of a linear inequality in two variables. |
| 71 | On Grade Level | Activity 16 Practice (p. 247) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 16. (p. 618) | Al: A-CED.A. 1 <br> A1: A-CED.A. 3 <br> Al: A-REI.B. 3 <br> Al: A-REI.D. 12 | - Write linear inequalities in two variables. <br> - Read and interpret the graph of the solutions of a linear inequality in two variables. <br> - Graph on a coordinate plane the solutions of a linear inequality in two variables. <br> - Interpret the graph of the solutions of a linear inequality in two variables. |
| 72 | On Grade Level | Embedded Assessment 1- Graphing Inequalities and Piecewise-Defined Functions (p. 249) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1-Graphing Inequalities and PiecewiseDefined Functions (p. 618) <br> - Consider Unpacking Embedded Assessment 2Systems of Equations and Inequalities (p. 283)during this time. |  | Assessment Focus: <br> - Linear inequalities <br> - Piecewise functions <br> - Graphing inequalities <br> - Graphing piecewise functions |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Intro to graphing two-variable inequalities • Solving and graphing linear inequalities <br> Khan Academy Practice: Two-variable inequalities |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 17

## Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
|  | 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: <br> - Systems of linear equations <br> - Systems of linear inequalities |
| 73 | On Grade Level | Lesson 17-1 The Graphing Method (p. 251) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 17-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 17-1 Practice (p. 255) | - 8.EE.C. 8 <br> Al: A-CED.A. 3 A1: A-REI.C. 6 A1: A-REI.D. 11 | - Solve a system of linear equations by graphing. <br> - Interpret the solution of a system of linear equations. |
|  | On Grade Level | Mini-lesson (optional): Using Graphing Calculators to Solve Systems of Equations (p. (1) 109) | Al: A-REI.C. 6 | - Explore systems of equations and their solutions using graphing calculators. |
| 74 | On Grade Level | Lesson 17-2 Using Tables and the Substitution <br> Method (p. 256) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 17-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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. <br> - Interpret the solution of a system of linear equations. |
| 75 | On Grade Level | Lesson 17-3 The Elimination Method (p. 261) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 17-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 17-3 Practice (p. 263) | 8.EE.C. 8 <br> A1: A-CED.A. 3 Al: 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. <br> - Write a system of linear equations to model a situation. |
| 76 | On Grade Level | Lesson 17-4 Systems Without a Unique Solution (p. 264) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 17-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 17-4 Practice (p. 266) | Al: A-REI.C. 5 Al: A-REI.C. 6 | - Explain when a system of linear equations has no solution. <br> - Explain when a system of linear equations has infinitely many solutions. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 17

## Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 77 | On Grade Level | Lesson 17-5 Classifying Systems of Equations (p. 267) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 17-5 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 17-5 Practice (p. 270) | Al: A-REI.C. 5 Al: A-REI.C. 6 | - Determine the number of solutions of a system of linear equations. <br> - Classify a system of linear equations as independent or dependent and as consistent or inconsistent. |
| 78 | On Grade Level | Activity 17 Practice (p. 271) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 17. (p. 618) | - Al: 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 <br> - Interpret the solution of a system of linear equations <br> - Solve a system of linear equations using a table or substitution <br> - Interpret the solution of a system of linear equations <br> - Use the elimination method to solve a system of linear equations <br> - Write a system of linear equations to model a situation <br> - Explain when a system of linear equations has no solution <br> - Explain when a system of linear equations has infinitely many solutions <br> - Determine the number of solutions of a system of linear equations <br> - Classify a system of linear equations as independent or dependent and as consistent or inconsistent |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Systems of equations with graphing • Systems of equations with graphing: $y=7 / 5 x 5 \& 3 / 5 x-1 \bullet$ Systems of equations with graphing: $5 x+3 y=7 \& 3 x-2 y=8 \bullet$ Systems of equations with graphing: chores $\bullet$ Systems of equations with substitution: $y=-1 / 4 x+100$ $\delta y=-1 / 4 x+120 \cdot$ Systems of equations with substitution: $-\underline{3 x}-\underline{4 y}=-2 \& y=2 x-\underline{5} \bullet$ Systems of equations with elimination: TV \& DVD $\bullet$ Systems of equations with elimination: $6 x-6 y=-24 \&-5 x-$ $5 y=-60 \cdot$ Systems of equations number of solutions: fruit prices (1 of 2 ) $\bullet$ Systems of equations number of solutions: fruit prices ( 2 of 2 ) • Forming systems of equations with different numbers of solutions <br> - Number of solutions to a system of equations graphically $\bullet$ Solutions to systems of equations: consistent vs. inconsistent $\cdot$ Solutions to systems of equations: dependent vs. independent Khan Academy Practice: System of equations |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 18

## Unit 3: Extensions of Linear Concepts Pacing: 25 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 79 | On Grade Level | Lesson 18-1 Representing the Solution of a System of Inequalities (p. 273) | A1: A-CED.A. 3 | - Determine whether an ordered pair is a solution of a system of linear inequalities. <br> - Graph the solutions of a system of linear inequalities. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 18-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 18-1 Practice (p. 277) | $\square$ Al: A-REI.D. 12 |  |
| 80 | On Grade <br> Level | Lesson 18-2 Interpreting the Solution of a System of Inequalities (p. 278) | Al: A-CED.A. 3 | - Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. <br> - Interpret solutions of systems of linear inequalities. |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 18-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 18-2 Practice (p. 280) | Al: A-REI.D. 12 |  |
| 81 | On Grade Level | Activity 18 Practice (p. 281) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 18. (p. 618) | Al: A-CED.A. 3 <br> A1: A-REI.D. 12 | - Determine whether an ordered pair is a solution of a system of linear inequalities. <br> - Graph the solutions of a system of linear inequalities. <br> - Identify solutions to systems of linear inequalities when the solution region is determined by parallel lines. <br> - Interpret solutions of systems of linear inequalities. |
| 82 | On Grade Level | Embedded Assessment 2- Systems of Equations and Inequalities (p. 283) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2- Systems of Equations and Inequalities (p. 618) <br> - Consider Unpacking Embedded Assessment 1Exponents, Radicals, and Geometric Sequences (p. 323) during this time. | Al: A-CED.A. 3 Al: A-REI.C. 6 | Assessment Focus: <br> - Systems of linear equations <br> - Systems of linear inequalities |
| 83 | On Grade Level | End of Unit 3 Assessment | Assesses Al standards covered in the unit. |  |
| (1) KHAACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Testing solutions to systems of inequalities • Intro to graphing systems of inequalities • Graphing systems of inequalities |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 19
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 84 | On Grade Level | Unpack Embedded Assessment 1Exponents, Radicals, and Geometric Sequences (p. 323) |  | Assessment Focus: <br> - Properties of exponents <br> - Integer exponents <br> - Simplifying expressions involving exponents <br> - Simplifying radical expressions <br> - Performing operations with radical expressions <br> - Distinguishing rational and irrational numbers <br> - Identifying geometric sequences <br> - Recursive and explicit formulas for geometric sequences <br> - Finding a given term of a geometric sequence |
|  | Remediation | Unit 4 Getting Ready (p. 286) | Assesses prerequisite skills necessary for work in Unit 4. |  |
|  | Remediation | Factoring (p. (1) 126) | $\begin{array}{r}\text { 4.OA.B. } 4 \\ \hdashline \text { 6.NS...... } 4\end{array}$ | - Find the greatest common factor of a pair of numbers. <br> - Find the prime factorization of arithmetic and algebraic expressions. |
|  |  | Exponential Expressions (p. (1) 129) | 6.EE.A. 1 <br> 6.E.... <br> 6.E. 2 | - Identify components of exponential expressions. <br> - Use exponent to write equivalent expressions. |
|  |  | Distributive Property (p. (1) 130) | - 3.OA.B. 5 | - Evaluate arithmetic expressions using the distributive property. |
|  |  | Linear Relationships in Tables (p. (1) 131) | 8.F.B. 4 | - Complete tables to create a linear representation. |
|  |  | Linear Equations and Their Graphs (p. (1) 132) | $\square$ A1: F-IF.C. 7 | - Use graphs of linear equations to solve problems. |
|  |  | Ratio (p. (1) 136) | - 6.RP.A.1 | -Write ratios to compare two quantities. |
|  |  | Real Numbers (p. (1) 140) | 8.NS.A. 1 | - Classify real numbers as rational or irrational. |
|  |  | Operations with Fractions (p. (1) 143) | - 7.NS.A.1b | - Perform arithmetic operations on fractions and mixed numbers. |
| 85 | On Grade Level | Lesson 19-1 Basic Exponent Properties (p. 287) | - 8.EE.A. 1 | - Develop basic exponent properties. <br> - Simplify expressions involving exponents. |
|  |  | Formative Assessment, Differentiation, and Practice 1. Lesson 19-1 Short Cycle Assessment (SBD) | $\square$ Al: A-SSE.B.3c |  |
|  |  | 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 19-1 Practice (p. 290) | A2: N-RN.A. 1 <br> A2: N-RN.A. 2 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 19
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 86 | On Grade Level | Lesson 19-2 Negative and Zero Powers (p. 291) | 8.EE.A. 1 | - Understand what is meant by negative and zero powers. <br> - Simplify expressions involving exponents. |
|  |  | Formative Assessment, Differentiation, and Practice 1. Lesson 19-2 Short Cycle Assessment (SBD) | $\square$ Al: A-SSE.B.3c |  |
|  |  | 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 19-2 Practice (p. 293) | A2: N-RN.A. 2 |  |
| 87 | On Grade Level | Lesson 19-3 Additional Properties of Exponents (p. 294) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 19-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 19-3 Practice (p. 296) | 8.EE.A. 1 | - Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. <br> - Simplify expressions involving exponents. |
|  |  |  | $\square$ Al: A-SSE.B.3c |  |
|  |  |  | A2: N-RN.A.1 |  |
|  |  |  | A2: N-RN.A. 2 |  |
| 88 | On Grade Level | Activity 19 Practice (p. 297) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 19. (p. 618) | 8.EE.A.1 | - Develop basic exponent properties. <br> - Simplify expressions involving exponents. <br> - Understand what is meant by negative and zero powers. <br> - Simplify expressions involving exponents. <br> - Develop the Power of a Power, Power of a Product, and the Power of a Quotient Properties. <br> - Simplify expressions involving exponents. |
|  |  |  | $\square$ Al: A-SSE.B.3c |  |
|  |  |  | A2: N-RN.A. 1 |  |
|  |  |  | A2: N-RN.A. 2 |  |
| 1)KHANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Exponent properties 1 • Exponent properties 2•Thinking more about negative exponents $\bullet$ More negative exponent intuition $\bullet$ Exponent properties with parentheses Khan Academy Practice: Exponential \& logarithmic functions |  |
|  |  |  |  |  |  |  |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 20
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 89 | On Grade Level | Lesson 20-1 Radical Expressions* (p. 299) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 20-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 20-1 Practice (p. 303) | Al: A-SSE.A. 2 A2: N-RN.A. 2 | - Write and simplify radical expressions. <br> - Understand what is meant by a rational exponent. |
|  | Remediation | Mini-lesson (optional): Using Prime Factorization to Simplify Square Roots (p. (1) 146) | - 8.NS.A. 1 | - Simplify square roots using prime factorization. |
| 90 |  | Lesson 20-2 Adding and Subtracting Radical Expressions (p. 304) | Al: N-RN.B. 3 |  |
|  | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 20-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 20-2 Practice (p. 306) | $\square$ Al: A-SSE.A. 2 | - Add radical expressions. <br> - Subtract radical expressions. |
| 91 | On Grade Level | Lesson 20-3 Multiplying and Dividing Radical Expressions (p. 307) | Al: N-RN.B. 3 |  |
|  |  | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 20-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 20-3 Practice (p. 310) | $\square$ Al: A-SSE.A. 2 | - Multiply and divide radical expressions. <br> - Rationalize the denominator of a radical expression. |
| 92 | On Grade Level | Activity 20 Practice (p. 311) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 20. (p. 618) | A2: N-RN.A. 2 Al: N-RN.B. 3 A1: A-SSE.A. 2 | - Write and simplify radical expressions. <br> - Understand what is meant by a rational exponent. <br> - Add radical expressions. <br> - Subtract radical expressions. <br> - Multiply and divide radical expressions. <br> - Rationalize the denominator of a radical expression. |
| DKHANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Simplifying radical expressions (subtraction) • Simplifying cube root expressions • Simplifying radical expressions: three variables Khan Academy Practice: Exponential \& logarithmic functions |  |

* contains some enrichment


## Louisiana Algebra 1 Curriculum Map

ACTIVITY 21
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 93 | On Grade Level | Lesson 21-1 Identifying Geometric Sequences (p. 313) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 21-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 21-1 Practice (p. 315) | Al: F-IF.A. 3 A2: F-BF.A. 2 <br> A1: F-LE.A. 1 | - Identify geometric sequences and the common ratio in a geometric sequence. <br> - Distinguish between arithmetic and geometric sequences. |
| 94 | On Grade Level | Lesson 21-2 Formulas for Geometric Sequences* (p. 316) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 21-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 21-2 Practice (p. 320) | $\square$ Al: F-IF.A. 3 <br> A2: F-BF.A. 2 | - Write a recursive formula for a geometric sequence. <br> - Write an explicit formula for a geometric sequence. <br> - Use a formula to find a given term of a geometric sequence. |
| 95 | On Grade Level | Activity 21 Practice (p. 321) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 21. (p. 618) |  | - Identify geometric sequences and the common ratio in a geometric sequence. <br> - Distinguish between arithmetic and geometric sequences. <br> - Write a recursive formula for a geometric sequence. <br> - Write an explicit formula for a geometric sequence. <br> - Use a formula to find a given term of a geometric sequence. |
| 96 | On Grade Level | Embedded Assessment 1-Exponents, Radicals, and Geometric Sequences (p. 323) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1-Exponents, Radicals, and Geometric Sequences (p. 618) <br> - Consider Unpacking Embedded Assessment 2Exponential Functions (p. 353) during this time. | A2: N-RN.A. 2 A1: A-SSE.A. 2 A1: A-SSE.B. 3 A1: F-IF.A. 3 <br> A2: F-BF.A. 2 A1: F-LE.A. 1 | Assessment Focus: <br> - Properties of exponents <br> - Integer exponents <br> - Simplifying expressions involving exponents <br> - Simplifying radical expressions <br> - Performing operations with radical expressions <br> - Distinguishing rational and irrational numbers <br> - Identifying geometric sequences <br> - Recursive and explicit formulas for geometric sequences <br> - Finding a given term of a geometric sequence |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Intro to geometric sequences Khan Academy Practice: Sequences |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 22
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 97 | On Grade Level | Unpack Embedded Assessment 2Exponential Functions (p. 353) |  | Assessment Focus: <br> - Exponential functions <br> - Compound interest |
|  | On Grade Level | Lesson 22-1 Exponential Functions and Exponential Growth (p. 325) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 22-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 22-1 Practice (p. 328) |  | - Understand the definition of an exponential function. <br> - Graph and analyze exponential growth functions. |
| 98 | On Grade Level | Lesson 22-2 Exponential Decay (p. 329) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 22-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 22-2 Practice (p. 332) |  | - Describe characteristics of exponential decay functions. <br> - Graph and analyze exponential decay functions. |
| 99 | On Grade Level | Lesson 22-3 Graphs of Exponential Functions (p. 333) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 22-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 22-3 Practice (p. 338) |  | - Describe key features of graphs of exponential functions. <br> - Compare graphs of exponential and linear functions. |
| 100 | On Grade Level | Activity 22 Practice (p. 339) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 22. (p. 618) |  | - Understand the definition of an exponential function. <br> - Graph and analyze exponential growth functions. <br> - Describe characteristics of exponential decay functions. <br> - Graph and analyze exponential decay functions. <br> - Describe key features of graphs of exponential functions. <br> - Compare graphs of exponential and linear functions. |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Exponential function graph • Intro to exponential functions • Linear vs. exponential growth - Writing exponential functions from tables <br> Khan Academy Practice: Exponential \& logarithmic functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 23
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Lesson 23-1 Compound Interest (p. 341) | $\square \mathrm{Al}$ : A-SSE.B. 3 | - Create an exponential function to model compound interest. |
| 101 | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 23-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 23-1 Practice (p. 346) | $\square$ Al: A-SSE.B.3c A1: A-CED.A. 1 |  |
|  |  | Lesson 23-2 Population Growth (p. 347) | $\square \mathrm{Al}$ : A-SSE.B. 3 | - Create an exponential function to fit population data. <br> - Interpret values in an exponential function. |
| 102 | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 23-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 23-2 Practice (p. 350) | A1: A-CED.A. 1 A2: S-ID.B. 6 |  |
| 103 | On Grade Level | Activity 23 Practice (p. 351) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 23. (p. 618) | $\square$ A1: A-SSE.B. 3 A1: A-CED.A. 1 | - Create an exponential function to model compound interest. <br> - Create an exponential function to fit population data. <br> - Interpret values in an exponential function. |
| 104 | On Grade Level | Embedded Assessment 2-Exponential Functions (p. 353) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2-Exponential Functions (p. 618) <br> - Consider Unpacking Embedded Assessment 3Polynomial Operations (p. 383) during this time. | Al: A-SSE.B. 3 A1: A-CED.A. 2 Al: F-IF.B. 4 A1: F-IF.C. 7 Al: F-LE.B. 5 | Assessment Focus: <br> - Exponential functions <br> - Compound interest |
|  |  | KANACADEMY | Continue the Khan Academy Algebra Mission. <br> 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 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 24
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 105 | On Grade Level | Unpack Embedded Assessment 3- Polynomial Operations (p. 383) | A1: A-APR.A. 1 | Assessment Focus: <br> - Adding polynomials <br> - Multiplying polynomials |
|  | On Grade Level | Lesson 24-1 Polynomial Terminology* (p. 355) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 24-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 24-1 Practice (p. 358) | Al: A-SSE.A.l $\square$ Al: A-SSE. A. 1 la $\square$ Al:................................................. | - Identify parts of a polynomial. <br> - Identify the degree of a polynomial. |
| 106 | On Grade Level | Lesson 24-2 Adding Polynomials (p. 359) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 24-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 24-2 Practice (p. 363) | A1: A-SSE.A. 1 A1: A-APR.A. 1 | - Use algebra tiles to add polynomials. <br> - Add polynomials algebraically. |
| 107 | On Grade Level | Lesson 24-3 Subtracting Polynomials (p. 364) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 24-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 24-3 Practice (p. 366) | A1: A-SSE.A. 1 Al: A-APR.A. 1 | - Subtract polynomials algebraically. |
|  | On Grade Level | Mini-lesson (optional): Subtracting Polynomials using Algebra Tiles (p. (1) 147) | A1: A-APR.A. 1 | - Use algebra tiles to subtract polynomials. |
| 108 | On Grade Level | Activity 24 Practice (p. 367) <br> - 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. <br> - Identify the degree of a polynomial. <br> - Use algebra tiles to add polynomials. <br> - Add polynomials algebraically. <br> - Subtract polynomials algebraically. |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> 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


## Louisiana Algebra 1 Curriculum Map

ACTIVITY 25
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 109 | On Grade Level | Lesson 25-1 Multiplying Binomials (p. 369) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 25-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 25-1 Practice (p. 375) | Al: A-SSE.A. 1 Al: A-APR.A. 1 | - Use a graphic organizer to multiply expressions. <br> - Use the Distributive Property to multiply expressions. |
| 110 | On Grade Level | Lesson 25-2 Special Products of Binomials (p. 376) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 25-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 25-2 Practice (p. 378) | A1: A-SSE.A. 1 <br> Al: A-APR.A. 1 | - Multiply binomials. <br> - Find special products of binomials. |
| 111 | On Grade Level | Lesson 25-3 Multiplying Polynomials (p. 379) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 25-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 25-3 Practice (p. 380) | Al: A-SSE.A. 1 Al: A-APR.A. 1 | - Use a graphic organizer to multiply polynomials. <br> - Use the Distributive Property to multiply polynomials. |
| 112 | On Grade Level | Activity 25 Practice (p. 381) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 25. (p. 618) | Al: A-SSE.A. 1 Al: A-APR.A. 1 | - Use a graphic organizer to multiply expressions. <br> - Use the Distributive Property to multiply expressions. <br> - Multiply binomials. <br> - Find special products of binomials. <br> - Use a graphic organizer to multiply polynomials. <br> - Use the Distributive Property to multiply polynomials. |
| 113 | On Grade Level | Embedded Assessment 3-Polynomial Operations (p. 383) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 3- Polynomial Operations (p. 618) | $\square \mathrm{Al}$ : A-APR.A. 1 | Assessment Focus: <br> - Adding polynomials <br> - Multiplying polynomials |
|  |  | KANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Multiplying binomials by polynomials • Polynomial word problem: area of a window $\bullet$ Squaring binomials of the form $(a x+b)^{2} \cdot$ Squaring a binomial $\bullet$ More examples of special products $\cdot$ Special products of the form $(a x+b)(a x-b)$ <br> Khan Academy Practice: Polynomial expressions, equations, \& functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 26
Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 114 | On Grade Level | Unpack Embedded Assessment 4: Factoring and Simplifying Rational Expressions (p. 419) | A1: A-SSE.A. 1 A1: A-SSE. $1 . . . . . . . . . . . . . . . . ~$ <br> A2: A-APR.D. 6 <br> A2: A-APR.D. 7 (+) | Assessment Focus: <br> - Factoring perfect square trinomials <br> - Factoring trinomials of the form $a x^{2}+b x+c$ <br> - Dividing polynomials <br> - Expressing the remainder of polynomial division as a rational expression <br> - Dividing rational expressions <br> - Simplifying rational expressions |
|  | On Grade Level | Lesson 26-1 Factoring by Greatest Common Factor (GCF) (p. 385) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 26-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 26-1 Practice (p. 387) |  | - Identify the GCF of the terms in a polynomial. <br> - Factor the GCF from a polynomial. |
|  | Remediation | Mini-lesson (optional): Greatest Common Factor of Monomials (p. (1) 149) | - 6.NS.B. 4 | - Factor the GCF from polynomials. |
| 115 | On Grade Level | Lesson 26-2 Factoring Special Products (p. 388) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 26-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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. |
| 116 | On Grade Level | Activity 26 Practice (p. 391) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 26. (p. 618) | Al: A-SSE.A. 1 Al: A-SSE.A. 2 | - Identify the GCF of the terms in a polynomial. <br> - Factor the GCF from a polynomial. Factor a perfect square trinomial. Factor a difference of two squares. |
| - KHANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Factoring with the distributive property • Factoring polynomials: common <br> factor $\bullet$ Solving quadratic equations by factoring $\bullet$ Factoring perfect squares <br> Khan Academy Practice: Polynomial expressions, equations, \& functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 27
Unit 4: Exponents, Radicals, and Polynomials
Pacing: 38 class periods
(90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 117 | On Grade Level | Lesson 27-1 Factoring $x^{2}+b x+c$ (p. 393) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 27-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 27-1 Practice (p. 397) | Al: A-SSE.A. 1 Al: A-SSE.A. 2 | - Use algebra tiles to factor trinomials of the form $x^{2}+b x+c$. <br> - Factor trinomials of the form $x^{2}+b x+c$. |
| 118 | On Grade Level | Lesson 27-2 Factoring $a x^{2}+b x+c$ (p. 398) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 27-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 27-2 Practice (p. 400) | A1: A-SSE.A. 1 A1: A-SSE.A. 1 a A1: A-SSE.A. 2 | - Factor trinomials of the form $a x^{2}+b x+c$ when the GCF is 1 . <br> - Factor trinomials of the form $a x^{2}+b x+c$ when the GCF is not 1 . |
| 119 | On Grade Level | Activity 27 Practice (p. 401) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 27. (p. 618) | Al: A-SSE.A. 1 A1: A-SSE.A. 2 | - Use algebra tiles to factor trinomials of the form $x^{2}+b x+c$. <br> - Factor trinomials of the form $x^{2}+b x+c$. <br> - Factor trinomials of the form $a x^{2}+b x+c$ when the GCF is 1 . <br> - Factor trinomials of the form $a x^{2}+b x+c$ when the GCF is not 1 . |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: More examples of factoring quadratics as $(x+a)(x+b) \bullet$ Factoring quadratics as $(x+a)(x+b)$ (example 2) $\cdot$ Factoring quadratics with common factor Khan Academy Practice: Polynomial expressions, equations, \& functions |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 27

Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
|  | Enrichment | Lesson 28-1 Simplifying Rational Expressions <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 28-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 28-1 Practice (p. 405) (p. 403) | A2: A-APR.D. 6 A2: A-APR.D. 7 (+) | - Simplify a rational expression by dividing a polynomial by a monomial. <br> - Simplify a rational expression by dividing out common factors. |
|  | Enrichment | Lesson 28-2 Dividing Polynomials (p. 406) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 28-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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. <br> - Express the remainder of polynomial division as a rational expression. |
|  | Enrichment | Lesson 28-3 Multiplying and Dividing Rational Expressions (p. 411) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 28-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 28-3 Practice (p. 412) | A2: A-APR.D. 6 A2: A-APR.D. 7 (+) | - Multiply rational expressions. <br> - Divide rational expressions. |
|  | Remediation | Mini-lesson (optional): Dividing Out Common Factors (p. (1) 151) | 6.NS.B. 4 | - Divide fractions and rational expressions. |
|  |  | Lesson 28-4 Adding and Subtracting Rational Expressions (p. 413) | A2: A-APR.D. 6 |  |
|  | Enrichment | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 28-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 28-4 Practice (p. 416) | A2: A-APR.D. 7 (+) | - Identify the least common multiple (LCM) of algebraic expressions. <br> - Add and subtract rational expressions. |
|  | Remediation | Mini-lesson (optional): Least Common Multiple (p. (1) 153) | 6.NS.B. 4 | - Determine the least common multiple of pairs of numbers. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 27

Unit 4: Exponents, Radicals, and Polynomials

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
|  | Enrichment | Activity 28 Practice (p. 417) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 28. (p. 618) | A2: A-APR.D. 6 <br> A2: A-APR.D. 7 (+) | - Simplify a rational expression by dividing a polynomial by a monomial. <br> - Simplify a rational expression by dividing out common factors. <br> - Divide a polynomial of degree one or two by a polynomial of degree one or two. <br> - Express the remainder of polynomial division as a rational expression. <br> - Multiply rational expressions. <br> - Divide rational expressions. <br> - Identify the least common multiple (LCM) of algebraic expressions. <br> - Add and subtract rational expressions. |
| 120 | On Grade Level | Embedded Assessment 4-Factoring and Simplifying <br> Rational Expressions (p. 419) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 4-Factoring and Simplifying Rational Expressions (p. 618) <br> - Consider Unpacking Embedded Assessment 1Graphing Quadratic Functions (p. 453) during this time. | $\square$ A1: A-SSE.A. 1 <br> $\square$ A1: A-SSE.A. 2 <br> A2: A-APR.D. 6 <br> A2: A-APR.D. 7 (+) | Assessment Focus: <br> - Factoring perfect square trinomials <br> - Factoring trinomials of the form $a x^{2}+b x+c$ <br> - Dividing polynomials <br> - Expressing the remainder of polynomial division as a rational expression <br> - Dividing rational expressions <br> - Simplifying rational expressions |
| 121 | On Grade Level | End of Unit 4 Assessment (SBD)* | Assesses Al standards covered in the unit. |  |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Intro to rational expression simplification <br> Khan Academy Practice: Rational expressions, equations, \& functions |  |

* contains some enrichment


## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 29

Unit 5: Quadratic Functions

## Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 122 | On Grade Level | Unpack Embedded Assessment 1- Graphing Quadratic Functions (p. 453) | A1: F-IF.B. 4 | Assessment Focus: <br> - Writing quadratic functions <br> - Analyzing quadratic functions <br> - Graphing quadratic functions <br> - Transforming quadratic functions |
|  |  |  | $\square$ Al: F-IF.B. 5 |  |
|  |  |  | $\square \mathrm{Al}$ : F-IF.C. 7 |  |
|  |  |  | $\square$ Al: F-IF.C. 9 |  |
|  |  |  | $\square$ Al: F-BF.A. 1 |  |
|  |  |  | - A1: F-BF.B. 3 |  |
|  | On Grade Level | Unit 5 Getting Ready (p. 422) | Assesses prerequisite skills necessary for work in Unit 5. |  |
|  | On Grade Level | Multiply Polynomial Expressions (p. (1) 183) | $\square$ Al: A-APR.A. 1 | - Use the distributive property to multiply polynomials. |
|  |  | Factoring Polynomial Expressions (p. (1) 185) | $\square$ Al: A-SSE.A. 2 | - Factor binomials and trinomials. |
|  |  | Evaluating Functions (p. (1) 189) | $\square$ Al: F-IF.A. 2 | - Substitute given input values to determine output values. |
|  |  | Solving Equations (p. (1) 190) | - 7.EE.B. 4 | - Use properties of equality to solve equations. |
|  |  | Solving Inequalities (p. (1) 191) | -7.EE.B. 4 | - Use properties of inequality to solve inequalities. |
|  |  | Linear Equations and Their Graphs (p. (1) 192) | $\square$ Al: F-IF.C. 7 | - Use graphs of linear equations to solve problems. |
|  |  | Interpreting Graphs of Linear Functions (p. (1) 196) | $\square \mathrm{Al}$ : F-IF.C. 7 | - Model a real-world situation with a linear function. |
| 123 |  | Lesson 29-1 Modeling with a Quadratic Function (p. 423) | $\square \mathrm{Al}$ : F-IF.C. 7 |  |
|  | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 29-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 29-1 Practice (p. 426) | $\square$ Al: F-BF.A. 1 | - Model a real-world situation with a quadratic function. <br> - Identify quadratic functions. <br> - Write a quadratic function in standard form. |
|  | On Grade Level | Mini-lesson (optional): Identifying Quadratic Functions (p. (1) 197) | 8.F.A. 1 | - Determine if functions are quadratic. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 29 <br> Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 124 | On Grade Level | Lesson 29-2 Graphing and Analyzing a Quadratic Function (p. 427) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 29-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 29-2 Practice (p. 430) |  | - Graph a quadratic function. <br> - Interpret key features of the graph of a quadratic function. |
| 125 | On Grade Level | Activity 29 Practice (p. 431) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 29. (p. 618) | A1: F-IF.B. 4 Al: F-IF.C. 7 Al: F-BF.A. 1 | - Model a real-world situation with a quadratic function. <br> - Identify quadratic functions. <br> - Write a quadratic function in standard form. <br> - Graph a quadratic function. <br> - Interpret key features of the graph of a quadratic function. |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Graphing quadratics: standard form • Graphing quadratics: vertex form <br> Khan Academy Practice: Quadratic equations \& functions |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 30 Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 126 | On Grade Level | Lesson 30-1 Translations of the Quadratic Parent Function (p. 433) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 30-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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 Al: F-BF.B. 3 | - Graph translations of the quadratic parent function. <br> - Identify and distinguish among transformations. |
| 127 | On Grade <br> Level | Lesson 30-2 Stretching and Shrinking the Quadratic Parent Function (p. 440) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 30-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 30-2 Practice (p. 443) |  | - Graph vertical stretches and shrinks of the quadratic parent function. <br> - Identify and distinguish among transformations. |
| 128 | On Grade Level | Lesson 30-3 Multiple Transformations of the Quadratic Parent Function (p. 444) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 30-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 30-3 Practice (p. 450) | $\square$ A1: F-IF.B. 4 <br> Al: F-IF.C. 7 <br> A1: F-IF.C. 9 <br> A1: F-BF.B. 3 | - Graph reflections of the quadratic parent function. <br> - Identify and distinguish among transformations. <br> - Compare functions represented in different ways. |
| 129 | On Grade Level | Activity 30 Practice (p. 451) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 30. (p. 618) | A1: F-IF.B. 4 Al: F-IF.B. 5 $\square$ Al:........... $\square$ Al: F-IF...... A1: F-BF.B. 3 | - Graph translations of the quadratic parent function. <br> - Identify and distinguish among transformations. <br> - Graph vertical stretches and shrinks of the quadratic parent function. <br> - Identify and distinguish among transformations. <br> - Graph reflections of the quadratic parent function. <br> - Identify and distinguish among transformations. <br> - Compare functions represented in different ways. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 30

## Unit 5: Quadratic Functions Pacing: 28 class periods ( $90-$ to 100 - minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 130 | On Grade Level | Embedded Assessment 1-Graphing Quadratic <br> Functions (p. 419) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment l-Graphing Quadratic Functions (p. 618) <br> - Consider Unpacking Embedded Assessment 2Solving Quadratic Equations (p. 493) during this time. | $\square$ Al: 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: <br> - Writing quadratic functions <br> - Analyzing quadratic functions <br> - Graphing quadratic functions <br> - Transforming quadratic functions |
|  |  | KHANACADEMY | Continue the Khan Acaden View Khan Academy Vid Khan Academy Practice: | Algebra Mission. <br> S: Intro to parabola transformations $\bullet$ Forms \& features of quadratic functions adratic equations \& functions |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 31 Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 131 | On Grade Level | Unpack Embedded Assessment 2-Solving <br> Quadratic Equations (p. 493) | $\square$ Al: N-Q.A. 3 | Assessment Focus: <br> - Solving quadratic equations by factoring <br> - Solving quadratic equations by the square root method <br> - Solving quadratic equations using the quadratic formula <br> - Choosing a method to solve a quadratic equation <br> - Writing the equation of a quadratic function to fit data <br> - Using a quadratic model to solve problems <br> - Interpreting solutions of a quadratic equation |
|  |  |  | $\square$ Al: A-SSE.B. 3 |  |
|  |  |  | A1: A-CED.A. 1 |  |
|  |  |  | Al: A-REI.B. 4 |  |
|  |  |  | A1: F-IF.B. 5 |  |
|  |  |  | $\square \mathrm{Al}$ : F-IF.C. 8 |  |
|  |  |  | $\square$ Al: F-BF.A. 1 |  |
|  | On Grade Level | Lesson 31-1 Solving by Graphing or Factoring (p. 455) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 31-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 31-1 Practice (p. 458) | $\square$ A1: A-SSE.B. 3 | - Use a graph to solve a quadratic equation. <br> - Use factoring to solve a quadratic equation. <br> - Describe the connection between the zeros of a quadratic function and the $x$-intercepts of the function's graph. |
|  |  |  | $\square$ A1: A-SSE.B.3a |  |
|  |  |  | Al: A-REI.B. 4 |  |
|  |  |  | Al: A-REI.B.4b |  |
| 132 | On Grade Level | Lesson 31-2 The Axis of Symmetry and the Vertex (p. 459) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 31-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 31-2 Practice (p. 461) | $\square$ Al: A-APR.B. 3 | - Identify the axis of symmetry of the graph of a quadratic function. <br> - Identify the vertex of the graph of a quadratic function. |
|  |  |  |  |  |
| 133 | On Grade Level | Lesson 31-3 Graphing a Quadratic Function (p. 462) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 31-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 31-3 Practice (p. 464) | $\square$ Al: A-APR.B. 3 | - Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. <br> - Interpret the graph of a quadratic function. |
|  |  |  | $\square$ Al: A-SSE.B.3a |  |
|  |  |  | $\square$ Al: F-IF.B. 4 |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 31

Unit 5: Quadratic Functions
Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 134 | On Grade Level | Activity 31 Practice (p. 465) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 31. (p. 618) | A1: A-APR.B. 3 Al: A-SSE.B. 3 A1: A-REI.B. 4 A1: F-IF.B. 4 | - Use a graph to solve a quadratic equation. <br> - Use factoring to solve a quadratic equation. <br> - Describe the connection between the zeros of a quadratic function and the $x$-intercepts of the function's graph. <br> - Identify the axis of symmetry of the graph of a quadratic function. <br> - Identify the vertex of the graph of a quadratic function. <br> - Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. <br> - Interpret the graph of a quadratic function. |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Vertex \& axis of symmetry of a parabola Khan Academy Practice: Quadratic equations \& functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 32 Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 135 | On Grade Level | Lesson 32-1 The Square Root Method (p. 467) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 32-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 32-1 Practice (p. 470) | A1: A-SSE.B. 3 Al: A-REI.B. 4 Al: A-REI.B.4a Al: F-IF.C. 8 | - Solve quadratic equations by the square root method. <br> - Provide examples of quadratic equations having a given number of real solutions. |
| 136 | On Grade <br> Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 32-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 32-2 Practice (p. 473) | Al: 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. <br> - Complete the square to analyze a quadratic function. |
|  | On Grade Level | Mini-lesson (optional): Using a Graphic Organizer to Complete the Square (p. (1) 198) | A1: A-REI.B. 4 | - Solve quadratic equations by completing the square. |
| 137 | On Grade Level | Lesson 32-3 The Quadratic Formula (p. 474) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 32-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 32-3 Practice (p. 476) | A1: A-SSE.B. 3 Al: A-REI.B. 4 A1: A-REI.B.4a Al: F-IF.C. 8 | - Derive the quadratic formula. <br> - Solve quadratic equations using the quadratic formula. |
|  | On Grade Level | Mini-lesson (optional): Simplifying Radicals (p. (1) 200) | A1: A-REI.B.4b | - Express solutions to quadratic equations in simplest radical form. |
| 138 | On Grade Level | Lesson 32-4 Choosing a Method and Using the Discriminant (p. 477) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 32-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 32-4 Practice (p. 479) | Al: A-SSE.B. 3 <br> Al: A-REI.B. 4 <br> Al: A-REI.B. 4 a A1: F-IF.C. 8 | - Choose a method to solve a quadratic equation. <br> - Use the discriminant to determine the number of real solutions of a quadratic equation. |
|  | Enrichment | Lesson 32-5 Complex Solutions (p. 480) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 32-5 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 32-5 Practice (p. 482) | A1: A-SSE.B. 3 A1: A-REI.B. 4 A1: F-IF.C. 8 | - Use the imaginary unit $i$ to write complex numbers. <br> - Solve a quadratic equation that has complex solutions. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 32 <br> Unit 5: Quadratic Functions <br> Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 139 | On Grade Level | Activity 32 Practice (p. 483) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 32. (p. 618) |  | - Solve quadratic equations by the square root method. <br> - Provide examples of quadratic equations having a given number of real solutions. <br> - Solve quadratic equations by completing the square. <br> - Complete the square to analyze a quadratic function. <br> - Derive the quadratic formula. <br> - Solve quadratic equations using the quadratic formula. <br> - Choose a method to solve a quadratic equation. <br> - Use the discriminant to determine the number of real solutions of a quadratic equation. <br> - Use the imaginary unit $i$ to write complex numbers. <br> - Solve a quadratic equation that has complex solutions. |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> 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 |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 33 Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 140 | On Grade Level | Lesson 33-1 Fitting Data with a Quadratic Function (p. 485) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 33-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 33-1 Practice (p. 487) | Al: A-CED.A. 1 <br> A1: F-IF.B. 5 Al: F-BF.A. 1 A1: S-ID.B. 6 | - Write a quadratic function to fit data. <br> - Use a quadratic model to solve problems. |
|  | On Grade <br> Level | Mini-lesson (optional): Quadratic Regression (p. (1) 201) | $\square$ Al: S-ID.B. 6 | - Use graphing calculators to write quadratic functions. |
| 141 | On Grade Level | Lesson 33-2 Interpreting Solutions of Quadratic Equations (p. 488) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 33-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 33-2 Practice (p. 490) | Al: A-REI.B. 4 Al: F-IF.B. 5 | - Solve quadratic equations. <br> - Interpret the solutions of a quadratic equation in a real-world context. |
|  | On Grade Level | Mini-lesson (optional): Solving a Quadratic Equation by Graphing (p. (1) 202) | $\square$ Al: F-IF.C. 7 | - Use graphing calculators to solve quadratic equations. |
| 142 | On Grade Level | Activity 33 Practice (p. 491) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 33. (p. 618) |  | - Write a quadratic function to fit data. <br> - Use a quadratic model to solve problems. <br> - Solve quadratic equations. <br> - Interpret the solutions of a quadratic equation in a real-world context. |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 33 Unit 5: Quadratic Functions Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 143 | On Grade Level | Embedded Assessment 2- Solving Quadratic <br> Equations (p. 493) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2- Solving Quadratic Equations (p. 618) <br> - Consider Unpacking Embedded Assessment 3Solving Systems of Equations (p. 519) during this time. | $\square$ Al: N-Q.A. 3 | Assessment Focus: <br> - Solving quadratic equations by factoring <br> - Solving quadratic equations by the square root method <br> - Solving quadratic equations using the quadratic formula <br> - Choosing a method to solve a quadratic equation <br> - Writing the equation of a quadratic function to fit data <br> - Using a quadratic model to solve problems <br> - Interpreting solutions of a quadratic equation |
|  |  |  | $\square$ Al: A-SSE.B. 3 |  |
|  |  |  | $\square$ Al: A-CED.A. 1 |  |
|  |  |  | A1: A-REI.B. 4 |  |
|  |  |  | Al: F-IF.B. 5 |  |
|  |  |  | $\square$ Al: F-IF.C. 8 |  |
|  |  |  | $\square$ Al: F-BF.A. 1 |  |
|  |  | KHANACADEMY | Continue the Khan Academ View Khan Academy Vide functions to scatter plots Khan Academy Practice: Qu | Algebra Mission. <br> s: Comparing models to fit data example $\bullet$ Fitting quadratic and exponential <br> adratic equations \& functions |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 34

## Unit 5: Quadratic Functions

Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 144 | On Grade Level | Unpack Embedded Assessment 3-Solving Systems of Equations (p. 519) | $\square$ A1: N-Q.A. 3 A2: A-R...... (1.......... A1: F-IF.B. 5 $\square$ Al. F-B.... $\square$ Al: F-L..... $\square$ | Assessment Focus: <br> - Identifying the type of function necessary to represent the value of items in a table <br> - Graphing linear, quadratic, and exponential functions <br> - Identifying the domain of a function <br> - Identifying increasing and decreasing functions <br> - Identifying the function with the greatest maximum value <br> - Solving systems of equations |
|  | On Grade Level | Lesson 34-1 Constructing Models (p. 495) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 34-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 34-1 Practice (p. 499) | $\square$ Al: F-IF.C. 7 $\square$ Al: F-IF.C.7a $\square$ Al: F-IF.C.7c $\square$ Al:.......... $\square$ A1: F-B.B....... | - Construct linear, quadratic, and exponential models for data. <br> - Graph and interpret linear, quadratic, and exponential functions. |
| 145 | On Grade Level | Lesson 34-2 Comparing Models (p. 500) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 34-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 34-2 Practice (p. 502) | $\square$ Al: F-IF.C. 9 $\square$ Al: F-BF.A. 1 $\square$ Al:......... F-BF.A. $\square$ Al: F-L..... $\square$ | - Identify characteristics of linear, quadratic, and exponential functions. <br> - Compare linear, quadratic, and exponential functions. |
| 146 | On Grade Level | Lesson 34-3 Extending Models (p. 503) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 34-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 34-3 Practice (p. 506) |  | - Compare piecewise-defined, linear, quadratic, and exponential functions. <br> - Write a verbal description that matches a given graph. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 34

## Unit 5: Quadratic Functions

Pacing: 28 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 147 | On Grade Level | Activity 34 Practice (p. 507) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 34. (p. 618) | Al: 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. <br> - Graph and interpret linear, quadratic, and exponential functions. <br> - Identify characteristics of linear, quadratic, and exponential functions. <br> - Compare linear, quadratic, and exponential functions. <br> - Compare piecewise-defined, linear, quadratic, and exponential functions. <br> - Write a verbal description that matches a given graph. |
|  |  | KHANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Comparing qrowth of exponential \& quadratic models • Writing exponential functions from tables $\bullet$ Writing exponential functions from graphs Khan Academy Practice: Functions |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 35 Unit 5: Quadratic Functions Pacing: 28 class periods ( 90 - to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
|  | Enrichment | Lesson 35-1 Solving a System Graphically (p. 509) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 35-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 35-1 Practice (p. 512) | A2: A-REI.C. 7 Al: A-REI.D. 11 A1: F-IF.C. 9 A1: F-LE.A. 3 | - Write a function to model a real-world situation. <br> - Solve a system of equations by graphing. |
|  | Enrichment | Lesson 35-2 Solving a System Algebraically (p. 513) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 35-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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. <br> - Solve a system of equations algebraically. |
|  | Enrichment | Activity 35 Practice (p. 517) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 35. (p. 618) | A2: A-REI.C. 7 Al: A-REI.D. 11 A1: F-IF.C. 9 A1: F-LE.A. 3 | - Write a function to model a real-world situation. <br> - Solve a system of equations by graphing. <br> - Write a system of equations to model a real-world situation. <br> - Solve a system of equations algebraically. |
| 148 | On Grade Level | Embedded Assessment 3- Solving Systems of <br> Equations (p. 519) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 3- Solving Systems of Equations (p. 618) <br> - Consider Unpack Embedded Assessment 1Comparing Univariate Distributions (p. 557) during this time. | Al: N-Q.A. 3 <br> A2: A-REI.C. 7 A1: F-IF.B. 5 A1: F-BF.A. 1 A1: F-LE.A. 3 | Assessment Focus: <br> - Identifying the type of function necessary to represent the value of items in a table <br> - Graphing linear, quadratic, and exponential functions <br> - Identifying the domain of a function <br> - Identifying increasing and decreasing functions <br> - Identifying the function with the greatest maximum value <br> - Solving systems of equations |
| 149 | On Grade Level | End-of-Unit 5 Assessment (SBD)* | Assesses Al standards covered in the unit. |  |
|  |  | HANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Quadratic systems: graphical solution • Quadratic systems: algebraic solution <br> Khan Academy Practice: System of equations |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 36
Unit 6: Probability and Statistics Pacing: 22 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 150 | On Grade Level | Unpack Embedded Assessment 1-Comparing Univariate Distributions (p. 557) | A1: S-ID.A. 1 <br> A1: S-ID.A. 2 <br> A1: S-ID.A. 3 | Assessment Focus: <br> - Visual comparison of univariate graphical displays <br> - Computational comparisons of center and spread <br> - Computing specific measures of center and spread (including fivenumber summary) <br> - Determining outliers <br> - Creating modified box plots <br> - Determining appropriate measures of variability |
|  | Remediation | Unit 6 Getting Ready (p. 522) | Assesses prerequisite skills necessary for work in Unit 6. |  |
|  | Remediation | Estimating a Trend Line (p. (1) 227) | 8.SP.A. 2 | - Write a linear equation to fit data represented in a scatter plot. |
|  |  |  | - 8.F.B. 4 | - Interpret the slope of a trend line in relation to the variable |
|  |  |  | 8.SP.A. 3 | quantities |
|  |  | Determining Missing Values in Two-Way Tables (p. (1) 230) | 8.SP.A. 4 | - Complete two-way tables using addition and subtraction. |
|  |  | Determining Row/Column Percentages in Two-Way Tables (p. (1) 232) | 8.SP.A. 4 | - Use two-way tables to find the row or column percentage. |
|  |  |  | 6.SP.A. 3 | - Find measures of central tendency for data sets. |
|  |  |  | -6.SP.B. 5 |  |
|  |  | Constructing a Graph for Univariate Data (p. (1) 237) | 6.SP.B. 4 | - Construct dot plot for sets of univariate data. |
|  |  | The Shape of the Distribution of Data (p. (1) 238) | 6.SP.A. 2 | - Describe the shape of data distributions shown in dot plots. |
| 151 |  | Lesson 36-1 Mean, Median, Mode, and MAD (p. 523) |  |  |
|  | On Grade Level | Formative Assessment, Differentiation, and Practice <br> 1. Lesson 36-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 36-2 Practice (p. 531) | A1: S-ID.A. 2 | - Interpret differences in center and spread of data in context. <br> - Compare center and spread of two or more data sets. <br> - Determine the mean absolute deviation of a set of data. |
|  | On Grade Level | Mini-lesson (optional): Measures of Central Tendency (p. (1) 239) | A1: S-ID.A. 2 | - Determine mean, median, and mode of given data sets. |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 36

## Unit 6: Probability and Statistics Pacing: 22 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 152 | On Grade Level | Lesson 36-2 Another Measure of Variability (p. 532) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 36-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 36-1 Practice (p. 535) | A1: S-ID.A. 2 | - Use summation and subscript notation. <br> - Calculate and interpret the standard deviation of a numerical data set. <br> - Select appropriate measures of spread by examining the shape of a distribution. |
| 153 | On Grade Level | Activity 36 Practice (p. 536) <br> - 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. <br> - Compare center and spread of two or more data sets. <br> - Determine the mean absolute deviation of a set of data. <br> - Use summation and subscript notation. <br> - Calculate and interpret the standard deviation of a numerical data set. <br> - Select appropriate measures of spread by examining the shape of a distribution. |
|  |  | KANACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Statistics intro: Mean, median, \& mode •Mean, median, \& mode example <br> - Comparing means of distributions $\bullet$ Means and medians of different distributions $\bullet$ Variance of a population <br> Khan Academy Practice: Displaying and describing data |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 37

Unit 6: Probability and Statistics

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 154 | On Grade Level | Lesson 37-1 Dot Plots and Box Plots (p. 537) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 37-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 37-1 Practice (p. 541) | A1: S-ID.A. 1 <br> A1: S-ID.A. 2 | - Construct representations of univariate data in a real-world context. <br> - Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. <br> - Compare distributions, commenting on similarities and differences among them. |
| 155 | On Grade Level | Lesson 37-2 Modified Box Plots (p. 543) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 37-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 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. <br> - Compare distributions, commenting on similarities and differences among them. |
| 156 | On Grade Level | Lesson 37-3 Normally Distributed (p. 548) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 37-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 37-3 Practice (p. 553) | Al: S-ID.A. 1 A1: S-ID.A. 2 <br> A2: S-ID.A. 4 | - Use the mean and standard deviation to fit a normal distribution. <br> - Develop an understanding of the normal distribution. <br> - Use technology to estimate the percentages under the normal curve. |
| 157 | On Grade Level | Activity 37 Practice (p. 554) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 37. (p. 618) | Al: S-ID.A. 1 <br> A1: S-ID.A. 2 <br> A1: S-ID.A. 3 <br> A2: S-ID.A. 4 | - Construct representations of univariate data in a real-world context. <br> - Describe characteristics of a data distribution, such as center, shape, and spread, using graphs and numerical summaries. <br> - Compare distributions, commenting on similarities and differences among them. <br> - Use modified box plots to summarize data in a way that shows outliers. <br> - Compare distributions, commenting on similarities and differences among them. <br> - Use the mean and standard deviation to fit a normal distribution. <br> - Develop an understanding of the normal distribution. <br> - Use technology to estimate the percentages under the normal curve. |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 37

## Unit 6: Probability and Statistics

## Pacing: 22 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 158 | On Grade Level | Embedded Assessment 1-Comparing Univariate <br> Distributions (p. 557) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1-Comparing Univariate Distributions (p. 618) <br> - Consider Unpacking Embedded Assessment 2Bivariate Distributions (p. 609) during this time. | A1: S-ID.A. 1 <br> A1: S-ID.A. 2 <br> A1: S-ID.A. 3 | Assessment Focus: <br> - Visual comparison of univariate graphical displays <br> - Computational comparisons of center and spread <br> - Computing specific measures of center and spread (including fivenumber summary) <br> - Determining outliers <br> - Creating modified box plots <br> - Determining appropriate measures of variability |
| (1)HANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Reading box plots • Constructing a box plot • Range and mid-range $\bullet$ Introduction to the normal distribution <br> Khan Academy Practice: Displaying and describing data |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 38
Unit 6: Probability and Statistics Pacing: 22 class periods (90- to 100-minutes)

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 159 | On Grade Level | Unpack Embedded Assessment 2-Bivariate Distributions (p. 609) |  | Assessment Focus: <br> - Describing a bivariate numerical relationship and associating that description with a correlation coefficient <br> - Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations <br> - Reading a two-way table <br> - Creating row percentages <br> - Developing a segmented bar graph <br> - Analyzing row percentages and segmented bar graphs to investigate association |
|  | On Grade Level | Lesson 38-1 Scatter Plots (p. 559) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 38-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 38-1 Practice (p. 563) | Al: S-ID.C. 8 | - Describe a linear relationship between two numerical variables in terms of direction and strength. <br> - Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables. |
| 160 | On Grade Level | Lesson 38-2 Correlation Coefficient (p. 564) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 38-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 38-2 Practice (p. 567) | Al: S-ID.C. 8 Al: S-ID.C. 9 | - Calculate correlation. <br> - Distinguish between correlation and causation. |
| 161 | On Grade Level | Activity 38 Practice (p. 569) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 38. (p. 618) | Al: S-ID.C. 8 Al: S-ID.C. 9 | - Describe a linear relationship between two numerical variables in terms of direction and strength. <br> - Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables. <br> - Calculate correlation. <br> - Distinguish between correlation and causation. |
| DKHANACADEMY |  |  | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Constructung a scatter plot $\cdot$ Correlation and causality <br> Khan Academy Practice: Describing relationships in quantitative data |  |

## Louisiana Algebra 1 Curriculum Map

## ACTIVITY 39

Unit 6: Probability and Statistics

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 162 | On Grade Level | Lesson 39-1 Line of Best Fit (p. 571) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 39-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 39-1 Practice (p. 576) | $\square$ Al: S-ID.B. 6 | - Describe the linear relationship between two numerical variables using the best-fit line. <br> - Use the equation of the best-fit line to make predictions and compare the predictions to actual values. |
| 163 | On Grade <br> Level | Lesson 39-2 Residuals (p. 577) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 39-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 39-2 Practice (p. 581) | $\square$ Al: S-ID.B. 6 | - Use technology to determine the equation of the best-fit line. <br> - Describe the linear relationship between two numerical variables using the best-fit line. <br> - Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables. |
| 164 | On Grade Level | Lesson 39-3 Interpreting the Slope and Intercept of the Best-Fit Line (p. 582) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 39-3 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 39-3 Practice (p. 587) |  | - Interpret the slope of the best-fit line in the context of the data. <br> - Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear. |
| 165 | On Grade Level | Lesson 39-4 Plotting Residuals (p. 588) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 39-4 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills <br> Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 39-4 Practice (p. 593) | $\square$ Al: S-ID.B. 6 | - Create a residual plot given a set of data and the equation of the best-fit line. <br> - Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables. |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 39
Unit 6: Probability and Statistics

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 166 | On Grade Level | Activity 39 Practice (p. 594) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 39. (p. 618) | $\square$ Al: S-ID.B. 6 A1: S-ID.C. 7 | - Describe the linear relationship between two numerical variables using the best-fit line. <br> - Use the equation of the best-fit line to make predictions and compare the predictions to actual values. <br> - Use technology to determine the equation of the best-fit line. <br> - Describe the linear relationship between two numerical variables using the best-fit line. <br> - Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables. <br> - Interpret the slope of the best-fit line in the context of the data. <br> - Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear. <br> - Create a residual plot given a set of data and the equation of the best-fit line. <br> - Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables. |
|  |  | KHNACADEMY | Continue the Khan Academy Algebra Mission. <br> View Khan Academy Videos: Fitting a line to data $\bullet$ Estimating the line of best fit exercise $\cdot$ Comparing models to fit data example - Interpreting a trend line <br> Khan Academy Practice: Describing relationships in quantitative data |  |

## Louisiana Algebra 1 Curriculum Map

ACTIVITY 40
Unit 6: Probability and Statistics

| Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus |
| :---: | :---: | :---: | :---: | :---: |
| 167 | On Grade Level | Lesson 40-1 Bivariate Categorical Data (p. 595) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 40-1 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 40-1 Practice (p. 599) | $\square$ Al: S-ID.B. 5 | - Summarize bivariate categorical data in a two-way frequency table. <br> - Interpret frequencies and relative frequencies in two-way tables. |
| 168 | On Grade Level | Lesson 40-2 Presenting Relative Frequency Data Graphically (p. 600) <br> Formative Assessment, Differentiation, and Practice <br> 1. Lesson 40-2 Short Cycle Assessment (SBD) <br> 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) <br> 3. Lesson 40-2 Practice (p. 606) | $\square$ Al: S-ID.B. 5 | - Interpret frequencies and relative frequencies in two-way tables. <br> - Recognize and describe patterns of association in two-way tables. |
| 169 | On Grade Level | Activity 40 Practice <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 40. (p. 618) | $\square$ Al: S-ID.B. 5 | - Summarize bivariate categorical data in a two-way frequency table. <br> - Interpret frequencies and relative frequencies in two-way tables. <br> - Interpret frequencies and relative frequencies in two-way tables. <br> - Recognize and describe patterns of association in two-way tables. |
| 170 | On Grade Level | Embedded Assessment 2- Bivariate Distributions (p. 557) <br> - Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2- Bivariate Distributions (p. 618) |  | - Describing a bivariate numerical relationship and associating that description with a correlation coefficient <br> - Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations <br> - Reading a two-way table <br> - Creating row percentages <br> - Developing a segmented bar graph <br> - Analyzing row percentages and segmented bar graphs to investigate association |
| 171 | On Grade Level | End-of-Unit 6 Assessment (SBD) | Assesses Al standards covered in the unit. |  |
|  |  | KHNACADEMY | Continue the Khan Academy Algebra Mission. <br> 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 |  |

