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.

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FLEX</td>
<td>DI-1</td>
<td>LEAP 360</td>
<td>DI-2</td>
<td>DI-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unpack</td>
<td>Diagnostic</td>
<td>Lesson 1-1</td>
<td>Lesson 1-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment</td>
<td>Assessment</td>
<td></td>
<td>THA Practice Activity 1</td>
</tr>
<tr>
<td>Week 2</td>
<td>DI-5</td>
<td>DI-6</td>
<td>DI-7</td>
<td>DI-8</td>
<td>DI-9</td>
</tr>
<tr>
<td></td>
<td>Lesson 2-1</td>
<td>Lesson 2-2</td>
<td>Lesson 2-3</td>
<td>Lesson 2-4</td>
<td>Lesson 2-5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THA Practice Activity 2</td>
</tr>
<tr>
<td>Week 3</td>
<td>DI-11</td>
<td>DI-2</td>
<td>DI-13</td>
<td>DI-14</td>
<td>DI-16</td>
</tr>
<tr>
<td></td>
<td>Embedded Assessment</td>
<td>Lesson 3-1</td>
<td>Lesson 3-2</td>
<td>Lesson 3-3</td>
<td>Embedded Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THA Practice Activity 3</td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>DI-17</td>
<td>DI-18</td>
<td>DI-19</td>
<td>DI-20</td>
<td>DI-21</td>
</tr>
<tr>
<td></td>
<td>End of Unit 1 Assessment</td>
<td>Unpack Assessment</td>
<td>Lesson 5-1</td>
<td>Lesson 5-2</td>
<td>Lesson 5-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Remediation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>DI-22</td>
<td>DI-23</td>
<td>DI-24</td>
<td>DI-25</td>
<td>DI-27</td>
</tr>
<tr>
<td></td>
<td>Practice Activity 5</td>
<td>Lesson 6-1</td>
<td>Lesson 6-2</td>
<td>Lesson 6-3</td>
<td>Lesson 7-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THA Practice Activity 6</td>
<td></td>
</tr>
<tr>
<td>Week 6</td>
<td>DI-28</td>
<td>DI-29</td>
<td>DI-30</td>
<td>DI-31</td>
<td>DI-32</td>
</tr>
<tr>
<td></td>
<td>Lesson 7-2</td>
<td>Lesson 7-3</td>
<td>Practice Activity 7</td>
<td>Lesson 8-1</td>
<td>Lesson 8-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>THA Practice Activity 8</td>
</tr>
<tr>
<td>Week 7</td>
<td>DI-34</td>
<td>DI-35</td>
<td>DI-36</td>
<td>1DI-37</td>
<td>DI-38</td>
</tr>
<tr>
<td></td>
<td>Embedded Assessment</td>
<td>Lesson 9-1</td>
<td>Lesson 9-2</td>
<td>Lesson 9-3</td>
<td>Practice Activity 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1D</td>
<td></td>
</tr>
<tr>
<td>Week 8</td>
<td>DI-39</td>
<td>DI-40</td>
<td>DI-41</td>
<td>DI-42</td>
<td>DI-43</td>
</tr>
<tr>
<td></td>
<td>Lesson 10-1</td>
<td>Lesson 10-2</td>
<td>Lesson 10-3</td>
<td>Practice Activity 10</td>
<td>Lesson 11-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 9</td>
<td>DI-44</td>
<td>DI-45</td>
<td>DI-46</td>
<td>DI-47</td>
<td>DI-48</td>
</tr>
<tr>
<td></td>
<td>Lesson 11-2</td>
<td>Lesson 11-3</td>
<td>Practice Activity 11</td>
<td>Embedded Assessment</td>
<td>Unpack Assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lesson 12-1</td>
</tr>
<tr>
<td>Week 10</td>
<td>DI-49</td>
<td>DI-50</td>
<td>DI-51</td>
<td>DI-52</td>
<td>DI-53</td>
</tr>
<tr>
<td></td>
<td>Lesson 12-2</td>
<td>Lesson 12-3</td>
<td>Lesson 12-4</td>
<td>Practice Activity 12</td>
<td>Lesson 13-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 11</td>
<td>DI-54</td>
<td>DI-55</td>
<td>DI-56</td>
<td>DI-57</td>
<td>DI-58</td>
</tr>
<tr>
<td></td>
<td>Lesson 13-2</td>
<td>Lesson 13-3</td>
<td>Practice Activity 13</td>
<td>Embedded Assessment</td>
<td>End of Unit 2 Assessment</td>
</tr>
</tbody>
</table>

<p>| Week 12 | End of Unit 2 Assessment | |
|---------|---------------------------|</p>
<table>
<thead>
<tr>
<th>Week 12</th>
<th>DI-59 Unpack Assessment Getting Ready</th>
<th>DI-60 Lesson 14-1</th>
<th>DI-61 Lesson 14-2</th>
<th>DI-62 Lesson 14-3</th>
<th>DI-63 Lesson 14-4 THA Practice Activity 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 14</td>
<td>DI-70 Lesson 16-2</td>
<td>DI-71 Practice Activity 16</td>
<td>DI-72 Embedded Assessment</td>
<td>DI-73 Unpack Assessment Lesson 17-1</td>
<td>DI-74 Lesson 17-2</td>
</tr>
<tr>
<td>Week 15</td>
<td>DI-75 Lesson 7-3</td>
<td>DI-76 Lesson 7-4</td>
<td>DI-77 Lesson 7-5</td>
<td>DI-78 Practice Activity 17</td>
<td>DI-79 Lesson 18-1</td>
</tr>
<tr>
<td>Week 16</td>
<td>DI-80 Lesson 18-2</td>
<td>DI-81 Practice Activity 18</td>
<td>DI-82 Embedded Assessment</td>
<td><strong>End of Unit 3 Assessment</strong></td>
<td><strong>Unpack Assessment Getting Ready</strong></td>
</tr>
<tr>
<td>Week 17</td>
<td>LEAP 360 Interim Form 1</td>
<td>DI-85 Lesson 19-1</td>
<td>DI-86 Lesson 19-2</td>
<td>DI-87 Lesson 19-3</td>
<td>DI-88 Practice Activity 19</td>
</tr>
<tr>
<td>Week 18</td>
<td>DI-89 Lesson 20-1</td>
<td>DI-90 Lesson 20-2</td>
<td>DI-91 Lesson 20-3</td>
<td>DI-92 Practice Activity 20</td>
<td>DI-93 Lesson 21-1</td>
</tr>
<tr>
<td>Week 19</td>
<td>DI-94 Lesson 21-2</td>
<td>DI-95 Practice Activity 21</td>
<td>DI-96 Embedded Assessment</td>
<td>DI-97 Unpack Assessment Lesson 22-1</td>
<td>DI-98 Lesson 22-2</td>
</tr>
<tr>
<td>Week 20</td>
<td>DI-99 Lesson 22-3</td>
<td>DI-100 Practice Activity 22</td>
<td>DI-101 Lesson 23-1</td>
<td>DI-102 Lesson 23-2</td>
<td>DI-103 Practice Activity 23</td>
</tr>
<tr>
<td>Week 21</td>
<td>DI-104 Embedded Assessment</td>
<td>DI-105 Unpack Assessment Lesson 24-1</td>
<td>DI-106 Lesson 24-2</td>
<td>DI-107 Lesson 24-3</td>
<td>DI-108 Practice Activity 24</td>
</tr>
<tr>
<td>Week 24</td>
<td>DI-120 Embedded Assessment</td>
<td><strong>End of Unit 4 Assessment</strong></td>
<td>DI-122 Unpack Assessment Getting Ready</td>
<td>DI-123 Lesson 29-1</td>
<td>DI-124 Lesson 29-2 THA Practice Activity 29</td>
</tr>
<tr>
<td>Week 25</td>
<td>DI-126 Lesson 30-1</td>
<td>DI-127 Lesson 30-2</td>
<td>DI-128 Lesson 30-3</td>
<td>DI-129 Practice Activity 30</td>
<td>DI-130 Embedded Assessment</td>
</tr>
<tr>
<td>Week 26</td>
<td>DI-131 Unpack Assessment Lesson 31-1</td>
<td>DI-132 Lesson 31-2</td>
<td>DI-133 Lesson 31-3</td>
<td>DI-134 Practice Activity 31</td>
<td>DI-135 Lesson 32-1</td>
</tr>
<tr>
<td>Week 27</td>
<td>DI-136 Lesson 32-2</td>
<td>DI-137 Lesson 32-3</td>
<td>DI-138 Lesson 32-4 THA Practice Activity 32</td>
<td><strong>LEAP 360 Interim Form 2</strong></td>
<td>DI-140 Lesson 33-1</td>
</tr>
<tr>
<td>Week 28</td>
<td>DI-141 Lesson 33-2 THA Practice Activity 33</td>
<td>DI-143 Embedded Assessment</td>
<td>DI-144 Lesson 34-1</td>
<td>DI-145 Lesson 34-2</td>
<td>DI-146 Lesson 34-3 THA Practice Activity 34</td>
</tr>
<tr>
<td>Week 29</td>
<td>DI-148 Embedded Assessment</td>
<td><strong>End of Unit 5 Assessment</strong></td>
<td>DI-150 Unpack Assessment Getting Ready</td>
<td>DI-151 Lesson 36-1</td>
<td>DI-152 Lesson 36-2 THA Practice Activity 36</td>
</tr>
<tr>
<td>Week 30</td>
<td>DI-154 Lesson 37-1</td>
<td>DI-155 Lesson 37-2</td>
<td>DI-156 Lesson 37-3 THA Practice Activity 37</td>
<td>DI-158 Embedded Assessment</td>
<td>LEAP Interim Form 3 (Optional)</td>
</tr>
<tr>
<td>Week 31</td>
<td>Week 32</td>
<td>Week 33</td>
<td>Week 34</td>
<td>Week 35</td>
<td>Week 36</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>DI-165 Lesson 39-4 THA Practice Activity 39</td>
<td>DI-167 Lesson 40-1</td>
<td>DI-168 Lesson 40-2 THA Practice Activity 40</td>
<td>DI-170 Embedded Assessment</td>
<td>Di-171 End of Unit 6 Assessment</td>
<td></td>
</tr>
</tbody>
</table>

Week 33: Reserved for state testing (dates will vary)
### ACTIVITY 1

#### Unit 1: Equations and Inequalities

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| **1**              | Remediation          | Unpack Embedded Assessment 1—Patterns and Equations (p. 61) | □ A1: N-Q.A.1 | Assessment Focus:  
|                    |                      |                     | □ A1: A-CED.A.1 | • Identifying patterns  
|                    |                      |                     | □ A1: A-CED.A.4 | • Modeling patterns with expressions  
|                    |                      |                     | □ A1: A-REI.A.1 | • Using patterns to make predictions  
|                    |                      |                     | □ A1: A-REI.B.3 | • Writing, solving, and interpreting multi-step equations  
|                    |                      |                     | □ A1: F-LE.A.1b | • Solving literal equations for a variable  
|                    | On Grade Level       | Unit 1 Getting Ready (p. 2) |                    | \[Louisiana Algebra 1 Curriculum Map\]  
|                    |                      | Operations with Fractions (p. 1) | 8.EE.A.1 | • Perform arithmetic operations on fractions and mixed numbers.  
|                    |                      | Exponents (p. 4) | 7.NS.A.1 | • Simplify arithmetic expressions involving exponents.  
|                    |                      | Operations with Mixed Numbers (p. 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.  
|                    |                      | Decimals (p. 11) | 6.NS.B.3 | • Compare and order integer expressions.  
|                    |                      | Solving One-Step Equations (p. 14) | 8.EE.C.7 | • Perform arithmetic operations with decimals.  
|                    |                      | Simplifying Expressions (p. 15) | 7.EE.A.1 | • Solve one-step equations.  
|                    |                      | Venn Diagrams (p. 16) | 6.SP.B.5 | • Simplify algebraic expressions using the distributive property.  
|                    |                      | | | • Use Venn diagrams to organize data.  
| **2**              | On Grade Level       | Lesson 1-1 Numeric and Graphic Representations of Data (p. 3) | □ A1: N-Q.A.1 | • Identify patterns in data.  
|                    |                      | Formative Assessment, Differentiation, and Practice  
|                    |                      | 1. Lesson 1-1 Short Cycle Assessment (SBD) | □ A1: N-Q.A.2 | • Use tables, graphs, and expressions to model situations.  
|                    |                      | 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) | □ A1: A-SSE.A.1a | • Use expressions to make predictions.  
|                    |                      | 3. Lesson 1-1 Practice (p. 7) | | |
### ACTIVITY 1

#### Unit 1: Equations and Inequalities

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 3                  | On Grade Level       | **Lesson 1-2** Writing Expressions (p. 8)  
  **Formative Assessment, Differentiation, and Practice**  
  1. Lesson 1-2 Short Cycle Assessment (SBD)  
  2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
  3. Lesson 1-2 Practice (p. 13) | □ A1: N-Q.A.1  
 □ A1: N-Q.A.2  
 □ A1: A-SSE.A.1a  
 A2: F-BF.A.2 |  
- Use patterns to write expressions.  
- Use tables, graphs, and expressions to model situations. |
| 4                  | On Grade Level       | **Activity 1 Practice** (p. 14)  
  - Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 1** (p. 618) | □ A1: N-Q.A.1  
 □ A1: N-Q.A.2  
 □ A1: A-SSE.A.1a  
 A2: F-BF.A.2 |  
- Identify patterns in data.  
- Use tables, graphs, and expressions to model situations.  
- Use expressions to make predictions.  
- Use patterns to write expressions.  
- Use tables, graphs, and expressions to model situations. |

**Khan Academy**

- 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

---

**Key:** ■ Major Work, □ Supporting Work, ◇ Additional Work, ◊ Prerequisite Skill
# Activity 2

## Unit 1: Equations and Inequalities

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

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

## Unit 1: Equations and Inequalities

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

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

#### Unit 1: Equations and Inequalities

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 11                 | On Grade Level       | **Embedded Assessment 1**—Patterns and Equations (p. 33)  
- Use SpringBoard Learning Strategy to engage students in reflection of the work of **Embedded Assessment 1**—Patterns and Equations (p. 618)  
- Consider **Unpacking Embedded Assessment 2**—Inequalities and Absolute Value (p. 61) during this time. | □ A1: N.Q.A.1  
□ A1: A-CED.A.1  
□ A1: A-CED.A.4  
□ A1: A-REI.A.1  
□ A1: A-REI.B.3  
□ A1: F-LE.A.1b | Assessment Focus:  
- Identifying patterns  
- Modeling patterns with expressions  
- Using patterns to make predictions  
- Writing, solving, and interpreting multi-step equations  
- Solving literal equations for a variable |

**Khan Academy**

*Continue the Khan Academy Algebra Mission.*

View Khan Academy Videos:  
- **Same thing to both sides of equations**  
- **Why we do the same thing to both sides: Variables on both sides**  
- **Representing a relationship with an equation**  
- **One-step equations intuition**  
- **One-step division equation**  
- **One-step multiplication equations**  
- **One-step subtraction equations**  
- **Simple equations: examples solving a variety of forms**  
- **Intro to two-step equations**  
- **One-step addition & subtraction equations**  
- **Dividing both sides of an equation**  
- **Two-step equations intuition**  
- **Intro to equations with variables on both sides**  
- **Equations with parentheses**  
- **Worked example: number of solutions to equations**  
- **Number of solutions to equations**  
- **Manipulating formulas: area**  
- **Solving an equation for a variable**

*Khan Academy Practice: Solving basic equations & inequalities*
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 12                 | On Grade Level       | **Unpack Embedded Assessment 2** – Inequalities and Absolute Value (p. 61) | A1: A-CED.A.1 | Assessment Focus:  
• Writing, solving, and graphing inequalities  
• Writing and graphing compound inequalities  
• Solving and graphing absolute value inequalities |
|                    |                      | **Lesson 3-1 Inequalities and Their Solutions (p. 35)**  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 3-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 3-1 Practice (p. 37) | A1: A-CED.A.1 | • Understand what is meant by a solution of an inequality.  
• Graph solutions of inequalities on a number line. |
| 13                 | On Grade Level       | **Lesson 3-2 Solving Inequalities (p. 38)**  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 3-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 3-2 Practice (p. 42) | A1: A-CED.A.1 | • Write inequalities to represent real-world situations.  
• Solve multi-step inequalities. |
| 14                 | On Grade Level       | **Lesson 3-3 Compound Inequalities (p. 43)**  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 3-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 3-3 Practice (p. 46) | A1: A-REI.B.3 | • Graph compound inequalities.  
• Solve compound inequalities. |
| 15                 | On Grade Level       | **Activity 3 Practice** (p. 47)  
Use SpringBoard Learning Strategy to engage students in reflection of the work of **Activity 3** (p. 618) | A1: A-CED.A.1 | • Understand what is meant by a solution of an inequality.  
• Graph solutions of inequalities on a number line.  
• Write inequalities to represent real-world situations.  
• Solve multi-step inequalities.  
• Graph compound inequalities.  
• Solve compound inequalities. |

**Khan Academy**  
View Khan Academy Videos:  
- One-step inequality word problem  
- One-step inequality involving addition  
- Inequalities using addition and subtraction  
- One-step inequalities examples  
- One-step inequalities:  
- \(-5c \leq 15\)  
- Two-step inequality word problems: apples  
- Two-step inequalities  
- Multi-step inequalities  
- Compound inequalities examples  
Khan Academy Practice: Solving basic equations & inequalities

**Key:**  
- Major Work  
- Supporting Work  
- Additional Work  
- Prerequisite Skill
### ACTIVITY 4

**Unit 1: Equations and Inequalities**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Enrichment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson 4-1 Absolute Value Equations (p. 49)</td>
<td>[A1: A-CED.A.1]</td>
<td>• Understand what is meant by a solution of an absolute value equation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formative Assessment, Differentiation, and Practice 1. Lesson 4-1 Short Cycle Assessment (SBD)</td>
<td></td>
<td>• Solve absolute value equations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Lesson 4-1 Practice (p. 53)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Enrichment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lesson 4-2 Absolute Value Inequalities (p. 54)</td>
<td>[A1: A-CED.A.1]</td>
<td>• Solve absolute value inequalities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formative Assessment, Differentiation, and Practice 1. Lesson 4-2 Short Cycle Assessment (SBD)</td>
<td></td>
<td>• Graph solutions of absolute value inequalities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Lesson 4-2 Practice (p. 58)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Solve absolute value equations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Solve absolute value inequalities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Graph solutions of absolute value inequalities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Enrichment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Embedded Assessment 2–Inequalities and Absolute Value (p.61)</td>
<td>[A1: A-CED.A.1]</td>
<td></td>
<td>Assessment Focus:</td>
</tr>
<tr>
<td></td>
<td>• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2–Inequalities and Absolute Value (p. 618)</td>
<td>[A1: A-CED.A.3]</td>
<td>• Writing, solving, and graphing inequalities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consider Unpacking Embedded Assessment 1–Representations of Functions (p. 121) during this time.</td>
<td>[A1: A-REI.B.3]</td>
<td>• Writing and graphing compound inequalities</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>16</strong> On Grade Level</td>
<td></td>
<td>• Solving and graphing absolute value inequalities</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>17</strong> On Grade Level</td>
<td><strong>End-of-Unit 1 Assessment</strong> (SBD)*</td>
<td></td>
<td><strong>Assesses A1 standards covered in the unit.</strong></td>
</tr>
</tbody>
</table>

* contains some enrichment

---

**Khan Academy**

View Khan Academy Videos: Intro to absolute value equations and graphs • Worked example: absolute value equations with no solution • Intro to absolute value inequalities

Khan Academy Practice: Absolute value equations, functions, & inequalities

---

**SpringBoard® College Board**

**Key:** ■ Major Work, ☐ Supporting Work, ◀ Additional Work, ♦ Prerequisite Skill

---

7
## Louisiana Algebra 1 Curriculum Map

### ACTIVITY 5

#### Unit 2: Functions

**Pacing:** 41 class periods (90- to 100- minutes)

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

**Key:** ▲ Major Work, ▼ Supporting Work, ◆ Additional Work, ◼ Prerequisite Skill

## SpringBoard CollegeBoard
### ACTIVITY 5

**Unit 2: Functions**

**Pacing:** 41 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 21                 | On Grade Level       | **Lesson 5-3** Function Notation (p. 76)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 5-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 5-3 Practice (p. 78) | ❧ A1: F-IF.A.1  
✧ A1: F-IF.A.2 | • Use and interpret function notation.  
• Evaluate a function for specific values of the domain. |
| 22                 | On Grade Level       | **Activity 5 Practice** (p. 79)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 5. (p. 618) | ❧ A1: F-IF.A.1  
✧ A1: F-IF.A.2 | • Represent relations and functions using tables, diagrams, and graphs.  
• Identify relations that are functions.  
• Describe the domain and range of a function.  
• Find input-output pairs for a function.  
• Use and interpret function notation.  
• Evaluate a function for specific values of the domain. |

**Khan Academy**

Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
- What is a function?  
- Relations and functions  
- Recognizing functions from verbal description  
- Domain and range of a function  
- What is the domain of a function?  
- What is the range of a function?  

Khan Academy Practice: Functions

**Key:**  ■ Major Work,  ☑ Supporting Work,  🔴 Additional Work,  ♦ Prerequisite Skill
## ACTIVITY 6

### Unit 2: Functions

**Pacing:** 41 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 23                 | On Grade Level       | Lesson 6-1 Key Features of Graphs (p. 81)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 6-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 6-1 Practice (p. 86) | □ A1: F-IF.B.4  
□ A1: F-IF.B.5 | • Relate the domain and range of a function to its graph.  
• Identify and interpret key features of graphs. |
| 24                 | On Grade Level       | Lesson 6-2 More Complex Graphs (p. 87)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 6-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 6-2 Practice (p. 91) | □ A1: F-IF.B.4  
□ A1: F-IF.B.5 | • Relate the domain and range of a function to its graph and to its function rule.  
• Identify and interpret key features of graphs. |
| 25                 | On Grade Level       | Lesson 6-3 Graphs of Real-World Situations (p. 92)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 6-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 6-3 Practice (p. 94) | □ A1: F-IF.B.4  
□ A1: F-IF.B.5  
□ A1: F-IF.C.7 | • Identify and interpret key features of graphs.  
• Determine the reasonable domain and range for a real-world situation. |
| 26                 | On Grade Level       | Activity 6 Practice (p. 95)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 6. (p. 618) | □ A1: F-IF.B.4  
□ A1: F-IF.B.5  
□ A1: F-IF.C.7 | Continue the Khan Academy Algebra Mission.  
View Khan Academy Algebra Videos:  
  • Worked example: domain and range from graph  
  • Recognizing functions from graph  
  • Testing if a relationship is a function  
  • Interpreting a graph example  
Khan Academy Practice: Linear equations, functions, & graphs |
### ACTIVITY 7

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 27                 | On Grade Level       | Lesson 7-1 The Spring Experiment (p. 97)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 7-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 7-1 Practice (p. 100)  
| ![A1: A-REI.D.10](image) | ![A1: F-IF.B.5](image)  
| ![A1: F-IF.C.7](image)  
| ![A1: F-IF.C.7a](image)  
| • Graph a function given a table.  
| • Write an equation for a function given a table or graph.  
| 28                 | On Grade Level       | Lesson 7-2 The Falling Object Experiment (p. 101)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 7-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 7-2 Practice (p. 104)  
| ![A1: A-REI.D.10](image)  
| ![A1: F-IF.B.5](image)  
| ![A1: F-IF.C.7](image)  
| ![A1: F-IF.C.7a](image)  
| • 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)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 7-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 7-3 Practice (p. 108)  
| ![A1: A-REI.D.10](image)  
| ![A1: F-IF.B.5](image)  
| ![A1: F-IF.C.7](image)  
| ![A1: F-IF.C.7e](image)  
| • Given a verbal description of a function, make a table and a graph of the function.  
| • Graph a function, and identify and interpret key features of the graph.  
| 30                 | On Grade Level       | Activity 7 Practice (p. 109)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 7. (p. 618)  
| ![A1: A-REI.D.10](image)  
| ![A1: F-IF.B.5](image)  
| ![A1: F-IF.C.7](image)  
| • Graph a function given a table.  
| • Write an equation for a function given a table or graph.  
| • Graph a function describing a real-world situation and identify and interpret key features of the graph.  
| • Given a verbal description of a function, make a table and a graph of the function.  
| • Graph a function, and identify and interpret key features of the graph.  

---

**Khan Academy**  
Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
- Exponential function graph  
- Interpreting a graph example  
Khan Academy Practice: Linear equations, functions, & graphs  

---

**Key:**  
- **Main:** Major Work  
- **Supporting:** Supporting Work  
- **Additional:** Additional Work  
- **Prerequisite:** Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>On Grade Level</td>
<td>Lesson 8-1 Exploring $f(x) + k$* (p. 111) Formative Assessment, Differentiation, and Practice 1. Lesson 8-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 8-1 Practice (p. 114)</td>
<td>A1: F-BF.B.3</td>
<td>• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$ . • Identify the transformation used to produce one graph from another.</td>
</tr>
<tr>
<td>32</td>
<td>On Grade Level</td>
<td>Lesson 8-2 Exploring $f(x + k)$* (p. 119) Formative Assessment, Differentiation, and Practice 1. Lesson 8-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 8-2 Practice (p. 118)</td>
<td>A1: F-BF.B.3</td>
<td>• Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$ . • Identify the transformation used to produce one graph from another.</td>
</tr>
<tr>
<td>33</td>
<td>On Grade Level</td>
<td>Activity 8 Practice (p. 119) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 8. (p. 618)</td>
<td>A1: F-BF.B.3</td>
<td>• Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$ . • Identify the transformation used to produce one graph from another. • Identify the effect on the graph of replacing $f(x)$ by $f(x + k)$ . • Identify the transformation used to produce one graph from another.</td>
</tr>
<tr>
<td>34</td>
<td>On Grade Level</td>
<td>Embedded Assessment 1–Representations of Functions (p. 121) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1–Representations of Functions (p. 618) • Consider Unpacking Embedded Assessment 2–Linear Functions and Equations (p. 173) during this time.</td>
<td>A1: F-IF.A.1, A1: F-IF.A.2, A1: F-IF.B.4, A1: F-IF.B.5, A1: F-BF.B.3</td>
<td>Assessment Focus: • Functions, range, and domain • Graphs of functions and their key features • Writing and using equations of functions • Transforming functions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Continue the Khan Academy Algebra Mission. View Khan Academy Videos: Shifting functions • Graphing shifted functions Khan Academy Practice: Functions</td>
<td></td>
<td>* contains some enrichment</td>
</tr>
</tbody>
</table>
## ACTIVITY 9

### Unit 2: Functions

**Pacing:** 41 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 35                 | On Grade Level       | **Unpack Embedded Assessment 2**—Linear Functions and Equations (p. 173) | A1: F-IF.B.5, A1: F-BF.A.1, A1: F-LE.A.2 | Assessment Focus:  
  • Modeling with tables, graphs and linear functions  
  • Analyzing linear models  
  • Determine the slope of a line from a graph.  
  • Develop and use the formula for slope. |
| 36                 | On Grade Level       | **Lesson 9-1** Slope (p. 123)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 9-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
| 37                 | On Grade Level       | **Lesson 9-2** Slope and Rate of Change (p. 128)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 9-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
| 38                 | On Grade Level       | **Activity 9 Practice** (p. 137)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 9. (p. 618) | A1: F-IF.B.6 |  

### Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos:  
  • Worked example: slope from graph  
  • Positive & negative slope  
  • Slope (more examples)
- Khan Academy Practice: Linear equations, functions, & graphs

### Consider using Desmos Classroom Activity Polygraph: Lines.
- Goals of this Activity:
  Students will be able to:  
  • Identify important features of lines  
  • Precisely describe these features to their peers  
  • Increase their vocabulary relevant to lines

### SpringBoard CollegeBoard

**Key:**  
- ☐ Major Work, ☐ Supporting Work, ☐ Additional Work, ☐ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day of Instruction</td>
<td>Level of Instruction</td>
<td>Instructional Focus</td>
<td>Louisiana Student Standard(s)</td>
<td>Learning Targets or Assessment Focus</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>------------------------------</td>
<td>--------------------------------------</td>
</tr>
</tbody>
</table>
| 42                 | On Grade Level       | **Activity 10 Practice** (p. 157) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 10. (p. 618) | □ A1: N-Q.A.3  
□ A1: A-CED.A.1  
□ A1: F-IF.B.5  
□ A1: F-BF.A.1  
A2: F-BF.B.4  
□ A1: F-LE.B.5 | • Write and graph direct variation.  
• Identify the constant of variation.  
• Write and graph indirect variations.  
• Distinguish between direct and indirect variation.  
• Write, graph, and analyze a linear model for a real-world situation.  
• Interpret aspects of a model in terms of the real-world situation.  
• Write the inverse function for a linear function.  
• Determine the domain and range of an inverse function. |

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos: [Intro to direct & inverse variation](#)  
[Direct variation word problem: space travel](#)  
[Intro to inverse functions](#)  
[Khan Academy Practice: Linear equations, functions, & graphs](#)
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 43                | On Grade Level       | Lesson 11-1         | A1: F-IF.B.5                  | • Identify sequences that are arithmetic sequences.  
|                   |                      | Formative Assessment, Differentiation, and Practice | A2: F-BF.A.2                     | • Use the common difference to determine a specified term of an arithmetic sequence. |
|                   |                      | Lesson 11-1 Short Cycle Assessment (SBD) |                           |                                     |
|                   |                      | 1. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) |                           |                                     |
|                   |                      | 2. Lesson 11-1 Practice (p. 161) |                           |                                     |
| 44                | On Grade Level       | Lesson 11-2         | A1: F-IF.B.5                  | • Develop an explicit formula for the nth term of an arithmetic sequence.  
|                   |                      | Formative Assessment, Differentiation, and Practice     | A2: F-BF.A.2                     | • Use an explicit formula to find any term of an arithmetic sequence.  
|                   |                      | Lesson 11-2 Short Cycle Assessment (SBD) |                           | • Write a formula for an arithmetic sequence given two terms or a graph. |
|                   |                      | 1. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) |                           |                                     |
|                   |                      | 2. Lesson 11-2 Practice (p. 165) |                           |                                     |
| 45                | On Grade Level       | Lesson 11-3         | A1: F-IF.A.3                  | • Use function notation to write a general formula for the nth term of an arithmetic sequence.  
|                   |                      | Formative Assessment, Differentiation, and Practice | A1: F-IF.B.5                  | • Find any term of an arithmetic sequence written as a function. |
|                   |                      | Lesson 11-3 Short Cycle Assessment (SBD) |                           |                                     |
|                   |                      | 1. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) |                           |                                     |
|                   |                      | 3. Lesson 11-3 Practice (p. 168) |                           |                                     |
|                   | Enrichment           | Lesson 11-4         | A1: F-IF.A.3                  | • Write a recursive formula for a given arithmetic sequence.  
|                   |                      | Formative Assessment, Differentiation, and Practice | A2: F-BF.A.2                     | • Use a recursive formula to find the terms of an arithmetic sequence. |
|                   |                      | Lesson 11-4 Short Cycle Assessment (SBD) |                           |                                     |
|                   |                      | 1. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) |                           |                                     |
|                   |                      | 3. Lesson 11-4 Practice (p. 170) |                           |                                     |
### ACTIVITY 11  
**Unit 2: Functions**  
Pacing: 41 class periods (90- to 100- minutes)

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

**Khan Academy**  
**Continue the Khan Academy Algebra Mission.**  
View Khan Academy Videos: [Intro to arithmetic sequences](https://www.khanacademy.org/math/algebra/arithmetic-sequences)  
[Sequences intro](https://www.khanacademy.org/math/algebra/arithmetic-sequences)  
[Practice: Sequences](https://www.khanacademy.org/math/algebra/arithmetic-sequences)

**Key:** □ Major Work, ▪ Supporting Work, ○ Additional Work, ◆ Prerequisite Skill
## Louisiana Algebra 1 Curriculum Map

### ACTIVITY 12

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
  - Scatter plots  
  - Linear regression  
  - Line of best fit  
  - Slope and domain  
  - Comparing data |
| 49                 | On Grade Level       | **Lesson 12-1 Slope-Intercept Form** (p. 175)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 12-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 12-1 Practice (p. 178)  
  ✔ 8.F.A.3  
  - Write the equation of a line in slope-intercept form.  
  - Use slope-intercept form to solve problems. |
| 50                 | On Grade Level       | **Lesson 12-2 Point-Slope Form** (p. 179)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 12-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 12-2 Practice (p. 182)  
**Mini-lesson (optional): Point-Slope Form** (p. 54)  
  ✔ A1: F-LE.A.2  
  - Write linear equations in point-slope form.  
  - Write linear equations in point-slope form given two points. |
|                     | On Grade Level       | **Lesson 12-3 Standard Form** (p. 183)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 12-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 12-3 Practice (p. 186)  
  ✔ A1: F-LE.A.2  
  - Write linear equations in standard form.  
  - Use the standard form of a linear equation to solve problems. |

---

**Key:**  
☐ Major Work  
☐ Supporting Work  
❖ Additional Work  
❖ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 51                 | On Grade Level       | **Lesson 12-4** Slopes of Parallel and Perpendicular Lines (p. 187) | □ A1: A-REI.D.10 | • Describe the relationship among the slopes of parallel lines and perpendicular lines.  
• Write an equation of a line that contains a given point and is parallel or perpendicular to a given line |
|                    |                      | **Formative Assessment, Differentiation, and Practice**  
1. Lesson 12-4 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 12-4 Practice (p. 190) | □ A1: F-LE.A.2 | |
| 52                 | On Grade Level       | **Activity 12 Practice** (p. 191)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 12. (p. 618) | □ A1: A-REI.D.10 | • Write the equation of a line in slope-intercept form.  
• Use slope-intercept form to solve problems.  
• Write the equation of a line in point-slope form.  
• Use point-slope form to solve problems.  
• Write the equation of a line in standard form.  
• Use the standard form of a linear equation to solve problems.  
• Describe the relationship among the slopes of parallel lines and perpendicular lines.  
• Write an equation of a line that contains a given point and is parallel or perpendicular to a given line |
|                    |                      | Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos: Modeling with linear equations: gym membership and lemonade • Graph from slope-intercept equation • Converting to slope-intercept form • Slope-intercept form from a table • Slope-intercept equation from graph • Graphing using intercepts • x-intercept of a line • Intercepts from a table • Slope-intercept equation from slope & point • Slope-intercept equation from two points • Writing linear equations in all forms  
Khan Academy Practice: Linear equations, functions, & graphs | □ A1: F-LE.A.2 |
|                    |                      | 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 | |

Key: □ Major Work, □ Supporting Work, ◆ Additional Work, ◆ Prerequisite Skill
### Activity 13

**Unit 2: Functions**

**Pacing:** 41 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 13-1 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 13-1 Practice (p. 196)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>On Grade Level</td>
<td>Lesson 13-2 Linear Regression (p. 197) Formative Assessment, Differentiation, and Practice</td>
<td>⊗ A1: F-LE.B.5</td>
<td>• Use a linear model to make predictions. • Use technology to perform a linear regression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 13-2 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 13-2 Practice (p. 199)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>On Grade Level</td>
<td>Lesson 13-3 Quadratic and Exponential Regressions (p. 200) Formative Assessment, Differentiation, and Practice</td>
<td>⊗ A1: S-ID.B.6</td>
<td>• Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 13-3 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 13-3 Practice (p. 204)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>On Grade Level</td>
<td>Activity 13 Practice (p. 205)</td>
<td>⊗ A1: F-IF.B.4 ⊗ A1: F-LE.A.2 ⊗ A1: F-LE.B.5 ⊗ A1: S-ID.B.6</td>
<td>• Use collected data to make a scatter plot. • Determine the equation of a trend line. • Use a linear model to make predictions. • Use technology to perform a linear regression • Use technology to perform quadratic and exponential regressions, and then make predictions. • Compare and contrast linear, quadratic, and exponential regressions.</td>
</tr>
</tbody>
</table>

- **Key:** ⊗ Major Work, ⊗ Supporting Work, ○ Additional Work, ◆ Prerequisite Skill
### Louisiana Algebra 1 Curriculum Map

**Unit 2: Functions**

**Pacing:** 41 class periods (90- to 100-minute periods)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 57                 | On Grade Level       | **Embedded Assessment 3**—Linear Models and Slope as Rate of Change (p. 207)  
• 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)  
• Consider **Unpacking Embedded Assessment 1**—Graphing Inequalities and Piecewise-Defined Functions (p. 249) during this time. | □ A1: F-IF.C.7  
□ A1: F-LE.A.2  
□ A1: F-LE.B.5 | **Assessment Focus:**  
• Scatter plots  
• Linear regression  
• Line of best fit  
• Slope and domain  
• Comparing data |
| 58                 | On Grade Level       | **End of Unit 2 Assessment (SBD)*** | **Assesses A1 standards covered in the unit.** | |

*contains some enrichment

---

**Khan Academy**

**View Khan Academy Videos:**  
- Constructing a scatter plot  
- Correlation and causality  
- Fitting a line to data  
- Comparing models to fit data  
- Estimating the line of best fit exercise  
- Interpreting a trend line

**Khan Academy Practice:**  
- Describing relationships in quantitative data

---

**Key:**  
- ■ Major Work  
- □ Supporting Work  
- ◇ Additional Work  
- ◆ Prerequisite Skill
### ACTIVITY 14

#### Unit 3: Extensions of Linear Concepts

**Pacing:** 25 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
• Linear inequalities  
• Piecewise functions  
• Graphing inequalities  
• Graphing piecewise functions |
|                    |                      | **Unit 3 Getting Ready** (p. 210) | **Assesses prerequisite skills necessary for work in Unit 3.** | |
|                    | Remediation          | Linear Data (p. 88) | □ A1: F-LE.A.1 | • Write and plot ordered pairs to determine if data is linear. |
|                    |                      | Writing an Equation for Data (p. 91) | □ A1: F-LE.A.2 | • Write linear equations from data represented in a table. |
|                    |                      | Linear Relationships (p. 93) | □ A1: F-LE.A.2 | • Determine if an equation is linear. |
|                    |                      | Graphing Linear Equations (p. 99) | □ A1: F-IF.C.7 | • Graph linear equations using the slope-intercept and x-and y-intercept methods. |
|                    |                      | Solutions of Linear Inequalities in Two Variables (p. 104) | □ A1: A-REI.D.12 | • Determine if ordered pairs represent solutions to linear inequalities. |
|                    |                      | Graphing Compound Inequalities (p. 105) | ◆ 6.EE.B.8 | • Compare and contrast graphs of compound inequalities. |
|                    |                      | Functions with a Constant Rate of Change (p. 106) | □ A1: 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 | • Use function notation and interpret statements that use function notation in terms of a context. |
|                    |                      | **Formative Assessment, Differentiation, and Practice** | | • Calculate the rate of change of a linear function presented in multiple representations. |
|                    |                      | 1. Lesson 14-1 Short Cycle Assessment (SBD) | □ A1: F-IF.B.6 | |
|                    |                      | 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) | | |
|                    |                      | 3. Lesson 14-1 Practice (p. 214) | | |
| 61                 | On Grade Level       | **Lesson 14-2** Writing Functions and Finding Domain and Range (p. 215) | □ A1: F-IF.A.2 | • Write linear equations in two variables given a table of values, a graph, or a verbal description. |
|                    |                      | **Formative Assessment, Differentiation, and Practice** | | • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. |
|                    |                      | 1. Lesson 14-2 Short Cycle Assessment (SBD) | | |
|                    |                      | 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) | | |
|                    |                      | 3. Lesson 14-2 Practice (p. 218) | | |
# ACTIVITY 14

## Unit 3: Extensions of Linear Concepts

**Pacing:** 25 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice 1. Lesson 14-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 14-3 Practice (p. 220)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice 1. Lesson 14-4 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii) 3. Lesson 14-4 Practice (p. 224)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>On Grade Level</td>
<td>Activity 14 Practice (p. 225)  • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 14. (p. 618)</td>
<td>□ A1: F-IF.A.2 □ A1: F-IF.B.5 □ A1: F-IF.B.6 □ A1: F-IF.C.7 □ A1: F-IF.C.9</td>
<td>• Use function notation and interpret statements that use function notation in terms of a context. • Calculate the rate of change of a linear function presented in multiple representations. • Write linear equations in two variables given a table of values, a graph, or a verbal description. • Determine the domain and range of a linear function, determine their reasonableness, and represent them using inequalities. • Evaluate a function at specific inputs within the function's domain • Graph piecewise-defined functions. • Compare the properties of two functions each represented in a different way.</td>
</tr>
</tbody>
</table>

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos: [Introduction to piecewise functions](#) • [Piecewise function graphs](#) • [Evaluate piecewise functions](#)
- Khan Academy Practice: Functions
### ACTIVITY 15

#### Unit 3: Extensions of Linear Concepts

**Pacing:** 25 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
- Analyze key features of a function given its graph. |

**Formative Assessment, Differentiation, and Practice**  
1. Lesson 15-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 15-1 Practice (p. 230)

- Write inequalities to represent real-world situations. |

**Formative Assessment, Differentiation, and Practice**  
1. Lesson 15-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 15-2 Practice (p. 234)

- Graph and analyze functions on the same coordinate plane. |

**Formative Assessment, Differentiation, and Practice**  
1. Lesson 15-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 15-3 Practice (p. 236)
### Activity 15 Practice (p. 237)
- Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 15 (p. 618)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>On Grade Level</td>
<td></td>
<td>A1: A-CED.A.2</td>
<td>Write a linear equation given a graph or a table.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: A-CED.A.3</td>
<td>Analyze key features of a function given its graph.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: A-REI.D.10</td>
<td>Graph and analyze functions on the same coordinate plane.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: F-IF.B.4</td>
<td>Write inequalities to represent real-world situations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: F-IF.B.6</td>
<td>Write a linear equation given a verbal description.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: F-IF.C.9</td>
<td>Graph and analyze functions on the same coordinate plane.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1: F-LE.B.5</td>
<td>Continue the Khan Academy Algebra Mission.</td>
</tr>
</tbody>
</table>

**Continue the Khan Academy Algebra Mission.**
- View Khan Academy Videos: [Modeling with linear equations: snow](#) • [Two-step equation word problem: oranges](#) • [Graphing a linear equation: y = 2x + 7](#) • [Linear graphs word problems](#) • [Linear function example: spending money](#)
- [Khan Academy Practice: Functions](#)
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 69                 | On Grade Level       | **Lesson 16-1** Writing and Graphing Inequalities in Two Variables (p. 239)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 16-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 16-1 Practice (p. 241)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 16-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 16-1 Practice (p. 241)  
**A1: A-CED.A.1**  
**A1: A-CED.A.3**  
**A1: A-REI.B.3**  
**A1: A-REI.D.12**  
• Write linear inequalities in two variables.  
• Read and interpret the graph of the solutions of a linear inequality in two variables. |
| 70                 | On Grade Level       | **Lesson 16-2** Graphing Inequalities in Two Variables (p. 242)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 16-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 16-2 Practice (p. 246)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 16-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 16-2 Practice (p. 246)  
**A1: A-CED.A.1**  
**A1: A-CED.A.3**  
**A1: A-REI.B.3**  
**A1: A-REI.D.12**  
• Graph on a coordinate plane the solutions of a linear inequality in two variables.  
• Interpret the graph of the solutions of a linear inequality in two variables. |
| 71                 | On Grade Level       | **Activity 16** Practice (p. 247)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 16. (p. 618)  
**A1: A-CED.A.1**  
**A1: A-CED.A.3**  
**A1: A-REI.B.3**  
**A1: A-REI.D.12**  
• Write linear inequalities in two variables.  
• Read and interpret the graph of the solutions of a linear inequality in two variables.  
• Graph on a coordinate plane the solutions of a linear inequality in two variables.  
• Interpret the graph of the solutions of a linear inequality in two variables. |
| 72                 | On Grade Level       | **Embedded Assessment 1**– Graphing Inequalities and Piecewise-Defined Functions (p. 249)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1– Graphing Inequalities and Piecewise-Defined Functions (p. 618)  
• Consider **Unpacking Embedded Assessment 2**– Systems of Equations and Inequalities (p. 283) during this time.  
**A1: A-CED.A.1**  
**A1: A-CED.A.2**  
**A1: A-CED.A.3**  
**A1: A-REI.D.12**  
**A1: F-IF.A.2**  
**A1: F-IF.C.7**  
Assessment Focus:  
• Linear inequalities  
• Piecewise functions  
• Graphing inequalities  
• Graphing piecewise functions |

**Khan Academy**  
Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
- Intro to graphing two-variable inequalities  
- Solving and graphing linear inequalities  
Khan Academy Practice: Two-variable inequalities

**Key:** □ Major Work, □ Supporting Work, ◇ Additional Work, ◆ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lesson 17-1</td>
<td>The Graphing Method (p. 251)</td>
<td>8.EE.C.8</td>
<td>• Solve a system of linear equations by graphing. &lt;br&gt;• Interpret the solution of a system of linear equations.</td>
</tr>
<tr>
<td>74</td>
<td>On Grade Level</td>
<td>Lesson 17-2 Using Tables and the Substitution Method (p. 256)</td>
<td>8.EE.C.8</td>
<td>• Solve a system of linear equations using a table or substitution. &lt;br&gt;• Interpret the solution of a system of linear equations.</td>
</tr>
<tr>
<td>75</td>
<td>On Grade Level</td>
<td>Lesson 17-3 The Elimination Method (p. 261)</td>
<td>8.EE.C.8</td>
<td>• Use the elimination method to solve a system of linear equations. &lt;br&gt;• Write a system of linear equations to model a situation.</td>
</tr>
<tr>
<td>76</td>
<td>On Grade Level</td>
<td>Lesson 17-4 Systems Without a Unique Solution (p. 264)</td>
<td>☐ A1: A-REI.C.5</td>
<td>• Explain when a system of linear equations has no solution. &lt;br&gt;• Explain when a system of linear equations has infinitely many solutions.</td>
</tr>
<tr>
<td>Day of Instruction</td>
<td>Level of Instruction</td>
<td>Instructional Focus</td>
<td>Louisiana Student Standard(s)</td>
<td>Learning Targets or Assessment Focus</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>78</td>
<td>On Grade Level</td>
<td>Activity 17 Practice (p. 271) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 17. (p. 618)</td>
<td>A1: A-CED.A.3 A1: A-REI.C.5 A1: A-REI.C.6 A1: A-REI.D.11</td>
<td>• Solve a system of linear equations by graphing • Interpret the solution of a system of linear equations • Solve a system of linear equations using a table or substitution • Interpret the solution of a system of linear equations • Use the elimination method to solve a system of linear equations • Write a system of linear equations to model a situation • Explain when a system of linear equations has no solution • Explain when a system of linear equations has infinitely many solutions • Determine the number of solutions of a system of linear equations • Classify a system of linear equations as independent or dependent and as consistent or inconsistent</td>
</tr>
</tbody>
</table>

Continue the Khan Academy Algebra Mission.
View Khan Academy Videos: Systems of equations with graphing • Systems of equations with graphing: $y = \frac{3}{7}x + 5$ & $\frac{3}{7}x - 1$ • Systems of equations with graphing: $5x + 3y = 7$ & $3x - 2y = 8$ • Systems of equations with graphing: chores • Systems of equations with substitution: $y = -\frac{1}{4}x + 100$ & $y = -\frac{3}{4}x + 120$ • Systems of equations with substitution: $-3x - 4y = -2$ & $y = 2x - 5$ • Systems of equations with elimination: TV & DVD • Systems of equations with elimination: $6x - 6y = -24$ & $-5x - 5y = -60$ • Systems of equations number of solutions: fruit prices (1 of 2) • Systems of equations number of solutions: fruit prices (2 of 2) • Forming systems of equations with different numbers of solutions • Number of solutions to a system of equations graphically • Solutions to systems of equations: consistent vs. inconsistent • Solutions to systems of equations: dependent vs. independent Khan Academy Practice: System of equations

Key: ■ Major Work, □ Supporting Work, ◇ Additional Work, ◊ Prerequisite Skill
# Louisiana Algebra 1 Curriculum Map

## ACTIVITY 18

### Unit 3: Extensions of Linear Concepts

**Pacing:** 25 class periods (90- to 100- minutes)

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

**Key:** ▪️ Major Work, ▫️ Supporting Work, ◈ Additional Work, ◈ Prerequisite Skill
# Louisiana Algebra 1 Curriculum Map

## ACTIVITY 19

**Unit 4: Exponents, Radicals, and Polynomials**

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
• Properties of exponents  
• Integer exponents  
• Simplifying expressions involving exponents  
• Simplifying radical expressions  
• Performing operations with radical expressions  
• Distinguishing rational and irrational numbers  
• Identifying geometric sequences  
• Recursive and explicit formulas for geometric sequences  
• Finding a given term of a geometric sequence |
| Remediation        |                      | **Unit 4 Getting Ready** (p. 286) | Assesses prerequisite skills necessary for work in Unit 4. | |
| 84                 | Remediation          | Factoring (p. 126) | ◆ 4.OA.B.4, ◆ 6.NS.B.4 | • Find the greatest common factor of a pair of numbers.  
• Find the prime factorization of arithmetic and algebraic expressions. |
|                    | Remediation          | Exponential Expressions (p. 129) | ◆ 6.EE.A.1, ◆ 6.EE.A.2 | • Identify components of exponential expressions.  
• Use exponent to write equivalent expressions. |
|                    | Remediation          | Distributive Property (p. 130) | ◆ 3.OA.B.5 | • Evaluate arithmetic expressions using the distributive property. |
|                    | Remediation          | Linear Relationships in Tables (p. 131) | ◆ 8.F.B.4 | • Complete tables to create a linear representation. |
|                    | Remediation          | Linear Equations and Their Graphs (p. 132) | □ A1: F-IF.C.7 | • Use graphs of linear equations to solve problems. |
|                    | Remediation          | Ratio (p. 136) | ◆ 6.RP.A.1 | • Write ratios to compare two quantities. |
|                    | Remediation          | Real Numbers (p. 140) | ◆ 8.NS.A.1 | • Classify real numbers as rational or irrational. |
|                    | Remediation          | Operations with Fractions (p. 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) | **Formative Assessment, Differentiation, and Practice**  
1. Lesson 19-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
• Simplify expressions involving exponents. |

**Key:** □ Major Work, ◆ Supporting Work, ○ Additional Work, ◆ Prerequisite Skill
### ACTIVITY 19

**Unit 4: Exponents, Radicals, and Polynomials**

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 86                 | On Grade Level       | Lesson 19-2 Negative and Zero Powers (p. 291)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 19-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 19-2 Practice (p. 293) | ◆ 8.EE.A.1  
- A1: A-SSE.B.3c  
- A2: N-RN.A.2 |  
- Understand what is meant by negative and zero powers.  
- Simplify expressions involving exponents. |
| 87                 | On Grade Level       | Lesson 19-3 Additional Properties of Exponents (p. 294)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 19-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 19-3 Practice (p. 296) | ◆ 8.EE.A.1  
- A1: A-SSE.B.3c  
- A2: N-RN.A.1  
- A2: N-RN.A.2 |  
- Simplify expressions involving exponents. |
| 88                 | On Grade Level       | Activity 19 Practice (p. 297)  
- Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 19. (p. 618) | ◆ 8.EE.A.1  
- A1: A-SSE.B.3c  
- A2: N-RN.A.1  
- A2: N-RN.A.2 |  
- Develop basic exponent properties.  
- Simplify expressions involving exponents.  
- Understand what is meant by negative and zero powers.  
- Simplify expressions involving exponents.  
- Simplify expressions involving exponents. |

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos:  
  - Exponent properties 1  
  - Exponent properties 2  
  - Thinking more about negative exponents  
  - More negative exponent intuition  
  - Exponent properties with parentheses
- Khan Academy Practice: Exponential & logarithmic functions

**Key:**  
- Major Work  
- Supporting Work  
- Additional Work  
- Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>On Grade Level</td>
<td>Lesson 20-1 Radical Expressions* (p. 299) Formative Assessment, Differentiation, and Practice 1. Lesson 20-1 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 20-1 Practice (p. 303)</td>
<td>A1: A-SSE.A.2</td>
<td>• Write and simplify radical expressions. • Understand what is meant by a rational exponent.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mini-lesson (optional): Using Prime Factorization to Simplify Square Roots (p. 146)</td>
<td></td>
<td>◆ 8.NS.A.1</td>
</tr>
<tr>
<td>91</td>
<td>On Grade Level</td>
<td>Lesson 20-3 Multiplying and Dividing Radical Expressions (p. 307) Formative Assessment, Differentiation, and Practice 1. Lesson 20-3 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 20-3 Practice (p. 310)</td>
<td>A1: N-RN.B.3</td>
<td>• Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.</td>
</tr>
<tr>
<td>92</td>
<td>On Grade Level</td>
<td>Activity 20 Practice (p. 311) 1. Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 20. (p. 618)</td>
<td>A2: N-RN.A.2</td>
<td>• Write and simplify radical expressions. • Understand what is meant by a rational exponent. • Add radical expressions. • Subtract radical expressions. • Multiply and divide radical expressions. • Rationalize the denominator of a radical expression.</td>
</tr>
</tbody>
</table>

**Continued from page 31**

* contains some enrichment

**Key:** ■ Major Work, □ Supporting Work, ○ Additional Work, ◆ Prerequisite Skill
# Louisiana Algebra 1 Curriculum Map

## Unit 4: Exponents, Radicals, and Polynomials

### ACTIVITY 21

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

### Khan Academy

- View Khan Academy Videos: [Intro to geometric sequences](https://www.khanacademy.org/math/algebra/exponential-functions/understanding-sequences/a/power-sequence)
- **Khan Academy Practice**: [Sequences](https://www.khanacademy.org/math/algebra/exponential-functions/understanding-sequences/a/power-sequence)

* contains some enrichment
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>On Grade Level</td>
<td>Unpack Embedded Assessment 2—Exponential Functions (p. 353)</td>
<td>□ A1: A-SSE.B.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: A-CED.A.2</td>
<td>Assessment Focus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: F-IF.B.4</td>
<td>• Exponential functions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: F-IF.C.7</td>
<td>• Compound interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: F-LE.B.5</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>On Grade Level</td>
<td>Lesson 22-1 Exponential Functions and Exponential Growth (p. 325)</td>
<td>□ A1: A-CED.A.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td>□ A1: F-IF.B.4</td>
<td>• Understand the definition of an exponential function.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 22-1 Short Cycle Assessment (SBD)</td>
<td>□ A1: F-IF.C.7</td>
<td>• Graph and analyze exponential growth functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 22-1 Practice (p. 328)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>On Grade Level</td>
<td>Lesson 22-2 Exponential Decay (p. 329)</td>
<td>□ A1: A-CED.A.1</td>
<td>• Describe characteristics of exponential decay functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td>□ A1: A-CED.A.2</td>
<td>• Graph and analyze exponential decay functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 22-2 Short Cycle Assessment (SBD)</td>
<td>□ A1: F-IF.B.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: F-IF.C.7</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>On Grade Level</td>
<td>Lesson 22-3 Graphs of Exponential Functions (p. 333)</td>
<td>□ A1: A-CED.A.1</td>
<td>• Describe key features of graphs of exponential functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td>□ A1: A-CED.A.2</td>
<td>• Compare graphs of exponential and linear functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 22-3 Short Cycle Assessment (SBD)</td>
<td>□ A1: F-IF.B.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 22-3 Practice (p. 338)</td>
<td>□ A1: F-LE.A.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>□ A1: F-LE.A.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activity 22 Practice** (p. 339)

• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 22. (p. 618)

**KHAN ACADEMY**

Continue the Khan Academy Algebra Mission.

View Khan Academy Videos: Exponential function graph • Intro to exponential functions • Linear vs. exponential growth • Writing exponential functions from tables

Khan Academy Practice: Exponential & logarithmic functions

**SpringBoard® CollegeBoard**

Key: □ Major Work, □ Supporting Work, □ Additional Work, ◆ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>On Grade Level</td>
<td><strong>Activity 23 Practice</strong> (p. 351) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 23. (p. 618)</td>
<td>□ A1: A-SSE.B.3  □ A1: A-CED.A.1</td>
<td>• Create an exponential function to model compound interest.  • Create an exponential function to fit population data.  • Interpret values in an exponential function.</td>
</tr>
</tbody>
</table>

**Khan Academy**

Continue the Khan Academy Algebra Mission.

View Khan Academy Videos: [Compound interest introduction](#) • [Exponential growth & decay word problems](#) • [Constructing exponential models](#) • [Modeling with basic exponential functions word problem](#)

Khan Academy Practice: [Exponential & logarithmic functions](#)
### ACTIVITY 24

**Unit 4: Exponents, Radicals, and Polynomials**

#### Key:
- **Major Work**
- **Supporting Work**
- **Additional Work**
- **Prerequisite Skill**

**Pacing:** 38 class periods (90- to 100- minutes)

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 105                | On Grade Level       | Unpack Embedded Assessment 3 - Polynomial Operations (p. 383) | A1: A-APR.A.1 | Assessment Focus:  
• Adding polynomials  
• Multiplying polynomials |
|                    | On Grade Level       | **Lesson 24-1** Polynomial Terminology* (p. 355)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 24-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 24-1 Practice (p. 358) | A1: A-SSE.A.1  
A1: A-SSE.A.1a  
A1: A-APR.A.1 | • Identify parts of a polynomial.  
• Identify the degree of a polynomial. |
| 106                | On Grade Level       | **Lesson 24-2** Adding Polynomials (p. 359)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 24-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
• Add polynomials algebraically. |
| 107                | On Grade Level       | **Lesson 24-3** Subtracting Polynomials (p. 364)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 24-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
3. Lesson 24-3 Practice (p. 366) | A1: A-APR.A.1 | • Subtract polynomials algebraically. |
| 108                | On Grade Level       | **Activity 24 Practice** (p. 367)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 24. (p. 618) | A1: A-SSE.A.1  
A1: A-APR.A.1 | • Identify parts of a polynomial.  
• Identify the degree of a polynomial.  
• Use algebra tiles to add polynomials.  
• Add polynomials algebraically.  
• Subtract polynomials algebraically. |

**Continue the Khan Academy Algebra Mission.**

View Khan Academy Videos:  
- [The parts of polynomial expressions](https://www.khanacademy.org/math/algebra/polynomials)  
- [Adding polynomials](https://www.khanacademy.org/math/algebra/polynomials)  
- [Subtracting polynomials](https://www.khanacademy.org/math/algebra/polynomials)  
- [Subtracting polynomials: two variables](https://www.khanacademy.org/math/algebra/polynomials)  
- [Subtracting polynomials with multiple variables](https://www.khanacademy.org/math/algebra/polynomials)  

**Khan Academy Practice:**  
- Polynomial expressions, equations, & functions

* contains some enrichment
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>109</td>
<td>On Grade Level</td>
<td>Lesson 25-1</td>
<td>A1: A-SSE.A.1</td>
<td>Use a graphic organizer to multiply expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td></td>
<td>Use the Distributive Property to multiply expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 25-1 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 25-1 Practice (p. 375)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td></td>
<td>Find special products of binomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 25-2 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 25-2 Practice (p. 378)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>On Grade Level</td>
<td>Lesson 25-3</td>
<td>A1: A-SSE.A.1</td>
<td>Use a graphic organizer to multiply polynomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td></td>
<td>Use the Distributive Property to multiply polynomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 25-3 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 25-3 Practice (p. 380)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>On Grade Level</td>
<td>Activity 25 Practice</td>
<td>A1: A-SSE.A.1</td>
<td>Use a graphic organizer to multiply expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p. 381)</td>
<td></td>
<td>Use the Distributive Property to multiply expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 25.</td>
<td></td>
<td>Multiply binomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p. 618)</td>
<td></td>
<td>Find special products of binomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 3– Polynomial Operations (p. 618)</td>
<td></td>
<td>Use a graphic organizer to multiply polynomials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A1: A-APR.A.1</td>
<td></td>
<td>Use the Distributive Property to multiply polynomials.</td>
</tr>
<tr>
<td>113</td>
<td>On Grade Level</td>
<td>Embedded Assessment 3–Polynomial Operations</td>
<td>A1: A-APR.A.1</td>
<td>Assessment Focus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(p. 383)</td>
<td></td>
<td>Adding polynomials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 3– Polynomial Operations (p. 618)</td>
<td></td>
<td>Multiplying polynomials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Continue the Khan Academy Algebra Mission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>View Khan Academy Videos: Multiplying binomials by polynomials</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Polynomial word problem: area of a window</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Squaring binomials of the form ((ax + b)^2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Squaring a binomial</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>More examples of special products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Special products of the form ((ax + b)(ax – b))</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Khan Academy Practice: Polynomial expressions, equations, &amp; functions</td>
</tr>
</tbody>
</table>
# Activity 26

## Unit 4: Exponents, Radicals, and Polynomials

### Louisana Algebra 1 Curriculum Map

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 114                | On Grade Level       | **Unpack Embedded Assessment 4**: Factoring and Simplifying Rational Expressions (p. 419) | □ A1: A-SSE.A.1  
□ A1: A-SSE.A.2  
□ A2: A-APR.D.6  
□ A2: A-APR.D.7 (+) | Assessment Focus:  
• Factoring perfect square trinomials  
• Factoring trinomials of the form $ax^2 + bx + c$  
• Dividing polynomials  
• Expressing the remainder of polynomial division as a rational expression  
• Dividing rational expressions  
• Simplifying rational expressions |
|                    |                     | **Lesson 26-1** Factoring by Greatest Common Factor (GCF) (p. 385) | □ A1: A-SSE.A.1  
□ A1: A-SSE.A.1a  
□ □ A1: A-SSE.A.1a  
□ □ A1: A-SSE.A.2 | □ □ Identify the GCF of the terms in a polynomial.  
□ □ Factor the GCF from a polynomial. |
| Remediation         | On Grade Level      | **Mini-lesson** (optional): Greatest Common Factor of Monomials (p. 149) |    | □ 6.NS.B.4 | □ Factor the GCF from polynomials. |
|                    |                     | **Lesson 26-2** Factoring Special Products (p. 388) | □ A1: A-SSE.A.1  
□ □ □ A1: A-SSE.A.2 | □ □ Identify the GCF of the terms in a polynomial.  
□ □ Factor a perfect square trinomial.  
□ □ Factor a difference of two squares. |
|                    | On Grade Level      | **Activity 26 Practice** (p. 391)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 26. (p. 618) | □ A1: A-SSE.A.1  
□ □ □ □ A1: A-SSE.A.2 | □ □ □ □ Identify the GCF of the terms in a polynomial.  
□ □ □ □ Factor the GCF from a polynomial.  
□ □ □ □ Factor a perfect square trinomial.  
□ □ □ □ Factor a difference of two squares. |

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos:  
  - Factoring with the distributive property  
  - Factoring polynomials: common factor  
  - Solving quadratic equations by factoring  
  - Factoring perfect squares
- Khan Academy Practice: Polynomial expressions, equations, & functions

**Key:** □ Major Work, □ Supporting Work, ◇ Additional Work, ◇ Prerequisite Skill
# ACTIVITY 27

## Unit 4: Exponents, Radicals, and Polynomials

**Pacing:** 38 class periods (90- to 100- minutes)

### Louisiana Algebra 1 Curriculum Map

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 117                | On Grade Level       | Lesson 27-1 Factoring $x^2 + bx + c$ (p. 393)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 27-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 27-1 Practice (p. 397) | ▲ A1: A-SSE.A.1  
▲ A1: A-SSE.A.2 | • Use algebra tiles to factor trinomials of the form $x^2 + bx + c$.  
• Factor trinomials of the form $x^2 + bx + c$. |
| 118                | On Grade Level       | Lesson 27-2 Factoring $ax^2 + bx + c$ (p. 398)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 27-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 27-2 Practice (p. 400) | ▲ A1: A-SSE.A.1  
▲ A1: A-SSE.A.1a  
▲ A1: A-SSE.A.2 | • Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1.  
• Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1. |
| 119                | On Grade Level       | Activity 27 Practice (p. 401)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 27. (p. 618) | ▲ A1: A-SSE.A.1  
▲ A1: A-SSE.A.2 | • Use algebra tiles to factor trinomials of the form $x^2 + bx + c$.  
• Factor trinomials of the form $x^2 + bx + c$.  
• Factor trinomials of the form $ax^2 + bx + c$ when the GCF is 1.  
• Factor trinomials of the form $ax^2 + bx + c$ when the GCF is not 1. |

**Khan Academy**

Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
- More examples of factoring quadratics as $(x + a)(x + b)$  
- Factoring quadratics as $(x + a)(x + b)$ (example 2)  
- Factoring quadratics with common factor  
- Khan Academy Practice: Polynomial expressions, equations, & functions

---

**Key:** ▲ Major Work, □ Supporting Work, ○ Additional Work, ◆ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrichment</td>
<td></td>
<td><strong>Lesson 28-1</strong> Simplifying Rational Expressions</td>
<td>A2: A-APR.D.6</td>
<td>• Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment, Differentiation, and Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 28-1 Short Cycle Assessment (SBD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 28-1 Practice (p. 405) (p. 403)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrichment</td>
<td></td>
<td><strong>Lesson 28-2</strong> Dividing Polynomials (p. 406)</td>
<td>A2: A-APR.D.6</td>
<td>• Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment, Differentiation, and Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 28-2 Short Cycle Assessment (SBD)</td>
<td>A2: A-APR.D.7 (+)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 28-2 Practice (p. 410)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrichment</td>
<td></td>
<td><strong>Lesson 28-3</strong> Multiplying and Dividing Rational Expressions (p. 411)</td>
<td>A2: A-APR.D.6</td>
<td>• Multiply rational expressions. • Divide rational expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment, Differentiation, and Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 28-3 Short Cycle Assessment (SBD)</td>
<td>A2: A-APR.D.7 (+)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 28-3 Practice (p. 412)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Mini-lesson (optional): Dividing Out Common Factors (p. 151)</td>
<td>6.NS.B.4</td>
<td>• Divide fractions and rational expressions.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td><strong>Lesson 28-4</strong> Adding and Subtracting Rational Expressions (p. 413)</td>
<td>A2: A-APR.D.6</td>
<td>• Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Formative Assessment, Differentiation, and Practice</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 28-4 Short Cycle Assessment (SBD)</td>
<td>A2: A-APR.D.7 (+)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 28-4 Practice (p. 416)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Mini-lesson (optional): Least Common Multiple (p. 153)</td>
<td>6.NS.B.4</td>
<td>• Determine the least common multiple of pairs of numbers.</td>
</tr>
</tbody>
</table>

Key: Major Work, Supporting Work, Additional Work, Prerequisite Skill
# Louisiana Algebra 1 Curriculum Map

## ACTIVITY 27

### Day of Instruction | Level of Instruction | Instructional Focus | Louisiana Student Standard(s) | Learning Targets or Assessment Focus
--- | --- | --- | --- | ---
 | Enrichment |  | Activity 28 Practice (p. 417) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 28. (p. 618) | A2: A-APR.D.6 | • Simplify a rational expression by dividing a polynomial by a monomial. • Simplify a rational expression by dividing out common factors. • Divide a polynomial of degree one or two by a polynomial of degree one or two. • Express the remainder of polynomial division as a rational expression. • Multiply rational expressions. • Divide rational expressions. • Identify the least common multiple (LCM) of algebraic expressions. • Add and subtract rational expressions. 

| 120 | On Grade Level | Embedded Assessment 4–Factoring and Simplifying Rational Expressions (p. 419) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 4–Factoring and Simplifying Rational Expressions (p. 618) • Consider Unpacking Embedded Assessment 1–Graphing Quadratic Functions (p. 453) during this time. | A1: A-SSE.A.1, A1: A-SSE.A.2, A2: A-APR.D.6, A2: A-APR.D.7 (+) | Assessment Focus: • Factoring perfect square trinomials • Factoring trinomials of the form $ax^2 + bx + c$ • Dividing polynomials • Expressing the remainder of polynomial division as a rational expression • Dividing rational expressions • Simplifying rational expressions


---

**Key:** ☑ Major Work, ☐ Supporting Work, ☀ Additional Work, ◇ Prerequisite Skill

---

* contains some enrichment
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
• Writing quadratic functions  
• Analyzing quadratic functions  
• Graphing quadratic functions  
• Transforming quadratic functions |
|                    | 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. 183) | □ A1: A-APR.A.1 | • Use the distributive property to multiply polynomials. |
|                    | On Grade Level       | Factoring Polynomial Expressions (p. 185) | □ A1: A-SSE.A.2 | • Factor binomials and trinomials. |
|                    | On Grade Level       | Evaluating Functions (p. 189) | □ A1: F-IF.A.2 | • Substitute given input values to determine output values. |
|                    | On Grade Level       | Solving Equations (p. 190) | □ 7.EE.B.4 | • Use properties of equality to solve equations. |
|                    | On Grade Level       | Solving Inequalities (p. 191) | □ 7.EE.B.4 | • Use properties of inequality to solve inequalities. |
|                    | On Grade Level       | Linear Equations and Their Graphs (p. 192) | □ A1: F-IF.C.7 | • Use graphs of linear equations to solve problems. |
|                    | On Grade Level       | Interpreting Graphs of Linear Functions (p. 196) | □ A1: F-IF.C.7 | • Model a real-world situation with a linear function. |
| 123                | On Grade Level       | **Lesson 29-1** Modeling with a Quadratic Function (p. 423) | □ A1: F-IF.C.7 | • Model a real-world situation with a quadratic function.  
• Identify quadratic functions.  
• Write a quadratic function in standard form. |
|                    | On Grade Level       | **Formative Assessment, Differentiation, and Practice**  
1. Lesson 29-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 29-1 Practice (p. 426) | □ A1: F-BF.A.1 | |
<p>|                    | On Grade Level       | <strong>Mini-lesson</strong> (optional): Identifying Quadratic Functions (p. 197) | □ 8.F.A.1 | • Determine if functions are quadratic. |</p>
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
|                    |                      | Formative Assessment, Differentiation, and Practice  
1. Lesson 29-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xxi or Khan Academy Practice p. xxii)  
3. Lesson 29-2 Practice (p. 430) | | |
| 125                | On Grade Level       | Activity 29 Practice (p. 431)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 29. (p. 618) | □ A1: F-IF.B.4 □ A1: F-IF.C.7 □ A1: F-BF.A.1 | • Model a real-world situation with a quadratic function.  • Identify quadratic functions.  • Write a quadratic function in standard form.  • Graph a quadratic function.  • Interpret key features of the graph of a quadratic function. |

Continue the Khan Academy Algebra Mission.  
Khan Academy Practice: Quadratic equations & functions
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
### ACTIVITY 30

**Unit 5: Quadratic Functions**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 130                | On Grade Level       | **Embedded Assessment 1**– Graphing Quadratic Functions (p. 419)  
- Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1–Graphing Quadratic Functions (p. 618)  
- Consider **Unpacking Embedded Assessment 2**–Solving Quadratic Equations (p. 493) during this time. | A1: F-IF.B.4  
A1: F-IF.B.5  
A1: F-IF.C.7  
A1: F-IF.C.9  
A1: F-BF.A.1  
A1: F-BF.B.3 | Assessment Focus:  
- Writing quadratic functions  
- Analyzing quadratic functions  
- Graphing quadratic functions  
- Transforming quadratic functions |

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos: [Intro to parabola transformations](https://www.khanacademy.org/math/algebra/x537e646f68e4f9a8:f3a26b7c75e3268:9a8a3515b350) • [Forms & features of quadratic functions](https://www.khanacademy.org/math/algebra/x537e646f68e4f9a8:f3a26b7c75e3268:9a8a3515b350)  
- Khan Academy Practice: Quadratic equations & functions
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
• Solving quadratic equations by factoring  
• Solving quadratic equations by the square root method  
• Solving quadratic equations using the quadratic formula  
• Choosing a method to solve a quadratic equation  
• Writing the equation of a quadratic function to fit data  
• Using a quadratic model to solve problems  
• Interpreting solutions of a quadratic equation |
• Use factoring to solve a quadratic equation.  
• Describe the connection between the zeros of a quadratic function and the x-intercepts of the function’s graph. |
• Identify the vertex of the graph of a quadratic function. |
• Interpret the graph of a quadratic function. |
### Activity 31

**Unit 5: Quadratic Functions**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>On Grade Level</td>
<td><strong>Activity 31 Practice</strong> (p. 465) • Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 31. (p. 618)</td>
<td>□ A1: A-APR.B.3 □ A1: A-SSE.B.3 □ A1: A-REI.B.4 □ A1: F-IF.B.4</td>
<td>• Use a graph to solve a quadratic equation. • Use factoring to solve a quadratic equation. • Describe the connection between the zeros of a quadratic function and the x-intercepts of the function's graph. • Identify the axis of symmetry of the graph of a quadratic function. • Identify the vertex of the graph of a quadratic function. • Use the axis of symmetry, the vertex, and the zeros to graph a quadratic function. • Interpret the graph of a quadratic function.</td>
</tr>
</tbody>
</table>

**Khan Academy**

Khan Academy Practice: [Quadratic equations & functions](https://www.khanacademy.org/math/algebra/quadratics/complete-the-square/a/vertex-and-axis-of-symmetry-of-parabolas)
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 135                | On Grade Level       | **Lesson 32-1** The Square Root Method (p. 467)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 32-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
□ A1: A-REI.B.4  
□ A1: A-REI.B.4a  
□ A1: F-IF.C.8 | • Solve quadratic equations by the square root method.  
• Provide examples of quadratic equations having a given number of real solutions. |
| 136                | On Grade Level       | **Lesson 32-2** Completing the Square (p. 471)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 32-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
□ A1: A-REI.B.4  
□ A1: A-REI.B.4a  
□ A1: F-IF.C.8 | • Solve quadratic equations by completing the square.  
• Complete the square to analyze a quadratic function. |
|                   | On Grade Level       | **Mini-lesson** (optional): Using a Graphic Organizer to Complete the Square (p. 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)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 32-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
□ A1: A-REI.B.4  
□ A1: A-REI.B.4a  
□ A1: F-IF.C.8 | • Derive the quadratic formula.  
• Solve quadratic equations using the quadratic formula. |
| 138                | On Grade Level       | **Lesson 32-4** Choosing a Method and Using the Discriminant (p. 477)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 32-4 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
□ A1: A-REI.B.4  
□ A1: A-REI.B.4a  
□ A1: F-IF.C.8 | • Choose a method to solve a quadratic equation.  
• Use the discriminant to determine the number of real solutions of a quadratic equation. |
|                   | Enrichment           | **Lesson 32-5** Complex Solutions (p. 480)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 32-5 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
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.  
• Solve a quadratic equation that has complex solutions. |
### ACTIVITY 32

#### Unit 5: Quadratic Functions

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 139                | On Grade Level       | **Activity 32 Practice** (p. 483)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 32. (p. 618)  
|                    |                      |                     | ![A1: A-SSE.B.3](#) | • Solve quadratic equations by the square root method.  
|                    |                      |                     | ![A1: A-REI.B.4](#) | • Provide examples of quadratic equations having a given number of real solutions.  
|                    |                      |                     | ![A1: A-REI.B.4b](#) | • Solve quadratic equations by completing the square.  
|                    |                      |                     | ![A1: F-IF.C.8](#) | • Complete the square to analyze a quadratic function.  
|                    |                      |                     | ![A1: A-SSE.B.3](#) | • Derive the quadratic formula.  
|                    |                      |                     | ![A1: A-REI.B.4](#) | • Solve quadratic equations using the quadratic formula.  
|                    |                      |                     | ![A1: A-REI.B.4b](#) | • Choose a method to solve a quadratic equation.  
|                    |                      |                     | ![A1: F-IF.C.8](#) | • Use the discriminant to determine the number of real solutions of a quadratic equation.  
|                    |                      |                     | ![A1: A-SSE.B.3](#) | • Use the imaginary unit $i$ to write complex numbers.  
|                    |                      |                     | ![A1: A-REI.B.4](#) | • Solve a quadratic equation that has complex solutions.  

**Key:** □ Major Work, □ Supporting Work, ◇ Additional Work, ◆ Prerequisite Skill

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos: [Solving quadratics by taking square roots: challenge](#) • [Completing the square](#) • [The quadratic formula](#) • [Discriminant review](#)
- [Khan Academy Practice: Quadratic equations & functions](#)
### ACTIVITY 33

**Unit 5: Quadratic Functions**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>On Grade Level</td>
<td>Lesson 33-1 Fitting Data with a Quadratic Function (p. 485)</td>
<td>□ A1: A-CED.A.1</td>
<td>• Write a quadratic function to fit data.</td>
</tr>
<tr>
<td></td>
<td>On Grade Level</td>
<td>Mini-lesson (optional): Quadratic Regression (p. 201)</td>
<td>□ A1: S-ID.B.6</td>
<td>• Use graphing calculators to write quadratic functions.</td>
</tr>
<tr>
<td></td>
<td>On Grade Level</td>
<td>Formative Assessment, Differentiation, and Practice 1. Lesson 33-2 Short Cycle Assessment (SBD) 2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii) 3. Lesson 33-2 Practice (p. 490)</td>
<td>□ A1: F-IF.B.5</td>
<td>• Interpret the solutions of a quadratic equation in a real-world context.</td>
</tr>
<tr>
<td>142</td>
<td>On Grade Level</td>
<td>Activity 33 Practice (p. 491) 1. Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 33. (p. 618)</td>
<td>□ A1: A-CED.A.1 □ A1: A-REI.B.4 □ A1: F-IF.B.5 □ A1: F-BF.A.1</td>
<td>• Write a quadratic function to fit data. • Use a quadratic model to solve problems. • Solve quadratic equations. • Interpret the solutions of a quadratic equation in a real-world context.</td>
</tr>
<tr>
<td>Day of Instruction</td>
<td>Level of Instruction</td>
<td>Instructional Focus</td>
<td>Louisiana Student Standard(s)</td>
<td>Learning Targets or Assessment Focus</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------</td>
</tr>
</tbody>
</table>
| 143               | On Grade Level       | **Embedded Assessment 2**—Solving Quadratic Equations (p. 493)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2—Solving Quadratic Equations (p. 618)  
• Consider **Unpacking Embedded Assessment 3**—Solving Systems of Equations (p. 519) during this time. | □ A1: N.Q.A.3  
□ A1: A-SSE.B.3  
□ A1: A-CED.A.1  
□ A1: A-REI.B.4  
□ A1: F-IF.B.5  
□ A1: F-IF.C.8  
□ A1: F-BF.A.1 | Assessment Focus:  
• Solving quadratic equations by factoring  
• Solving quadratic equations by the square root method  
• Solving quadratic equations using the quadratic formula  
• Choosing a method to solve a quadratic equation  
• Writing the equation of a quadratic function to fit data  
• Using a quadratic model to solve problems  
• Interpreting solutions of a quadratic equation |

**Khan Academy**

Continue the Khan Academy Algebra Mission.

View Khan Academy Videos: [Comparing models to fit data example](https://www.khanacademy.org/math/algebra2/exponential/logarithmic-functions/comparing-models-to-fit-data/v/comparing-exponential-and-quadratic-models)  
[Introduction to quadratic functions](https://www.khanacademy.org/math/algebra2/exponential-logarithmic-functions/quadratic-functions/introduction-to-quadratic-functions)  
[Fitting quadratic and exponential functions to scatter plots](https://www.khanacademy.org/math/algebra2/exponential-logarithmic-functions/quadratic-functions/fitting-quadratic-and-exponential-functions-to-scatter-plots)  
### Pacing: 28 class periods (90- to 100- minutes)

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

**Unit 5: Quadratic Functions**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
</tr>
</thead>
</table>
| 147                | On Grade Level       | **Activity 34 Practice** (p. 507)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 34. (p. 618) |

**Louisiana Student Standard(s)**

- A1: F-IF.C.7
- A1: F-IF.C.9
- A1: F-BF.A.1
- A1: F-LE.A.3

**Learning Targets or Assessment Focus**

- Construct linear, quadratic, and exponential models for data.
- Graph and interpret linear, quadratic, and exponential functions.
- Identify characteristics of linear, quadratic, and exponential functions.
- Compare linear, quadratic, and exponential functions.
- Compare piecewise-defined, linear, quadratic, and exponential functions.
- Write a verbal description that matches a given graph.

---

**Khan Academy**

- Continue the Khan Academy Algebra Mission.
- View Khan Academy Videos: *Comparing growth of exponential & quadratic models* • *Writing exponential functions from tables* • *Writing exponential functions from graphs*
- Khan Academy Practice: *Functions*
# ACTIVITY 35

## Unit 5: Quadratic Functions

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

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

---

* contains some enrichment
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Grade Level</td>
<td></td>
<td>Unpack Embedded Assessment 1—Comparing Univariate Distributions (p. 557)</td>
<td>A1: S-ID.A.1</td>
<td>Assessment Focus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Visual comparison of univariate graphical displays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Computational comparisons of center and spread</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Computing specific measures of center and spread (including five-number summary)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Determining outliers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Creating modified box plots</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Determining appropriate measures of variability</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Unit 6 Getting Ready (p. 522)</td>
<td></td>
<td>Assesses prerequisite skills necessary for work in Unit 6.</td>
</tr>
<tr>
<td>150</td>
<td>Remediation</td>
<td>Estimating a Trend Line (p. 227)</td>
<td>8.SP.A.2</td>
<td>Write a linear equation to fit data represented in a scatter plot.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Interpreting Slope in Context (p. 229)</td>
<td>8.F.B.4 8.SP.A.3</td>
<td>Interpret the slope of a trend line in relation to the variable quantities.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Determining Missing Values in Two-Way Tables (p. 230)</td>
<td>8.SP.A.4</td>
<td>Complete two-way tables using addition and subtraction.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Determining Row/Column Percentages in Two-Way Tables (p. 232)</td>
<td>8.SP.A.4</td>
<td>Use two-way tables to find the row or column percentage.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Mean, Median, Mode (p. 234)</td>
<td>6.SP.A.3 6.SP.B.5</td>
<td>Find measures of central tendency for data sets.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>Constructing a Graph for Univariate Data (p. 237)</td>
<td>6.SP.B.4</td>
<td>Construct dot plot for sets of univariate data.</td>
</tr>
<tr>
<td>Remediation</td>
<td></td>
<td>The Shape of the Distribution of Data (p. 238)</td>
<td>6.SP.A.2</td>
<td>Describe the shape of data distributions shown in dot plots.</td>
</tr>
<tr>
<td>On Grade Level</td>
<td></td>
<td>Lesson 36-1 Mean, Median, Mode, and MAD (p. 523)</td>
<td>A1: S-ID.A.2</td>
<td>Interpret differences in center and spread of data in context.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Formative Assessment, Differentiation, and Practice</td>
<td></td>
<td>• Compare center and spread of two or more data sets.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Lesson 36-2 Short Cycle Assessment (SBD)</td>
<td></td>
<td>• Determine the mean absolute deviation of a set of data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Lesson 36-2 Practice (p. 531)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Grade Level</td>
<td></td>
<td>Mini-lesson (optional): Measures of Central Tendency (p. 239)</td>
<td>A1: S-ID.A.2</td>
<td>Determine mean, median, and mode of given data sets.</td>
</tr>
<tr>
<td>On Grade Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Louisiana Algebra 1 Curriculum Map

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 152                | On Grade Level       | Lesson 36-2 Another Measure of Variability (p. 532)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 36-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvii or Khan Academy Practice p. xxii)  
• Calculate and interpret the standard deviation of a numerical data set.  
• Select appropriate measures of spread by examining the shape of a distribution. |
| 153                | On Grade Level       | Activity 36 Practice (p. 536)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 36. (p. 618) | A1: S-ID.A.2 | • Interpret differences in center and spread of data in context.  
• Compare center and spread of two or more data sets.  
• Determine the mean absolute deviation of a set of data.  
• Use summation and subscript notation.  
• Calculate and interpret the standard deviation of a numerical data set.  
• Select appropriate measures of spread by examining the shape of a distribution. |

**Khan Academy**

```
Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
Statistics intro: Mean, median, & mode  
Mean, median, & mode example  
Comparing means of distributions  
Means and medians of different distributions  
Variance of a population  
Khan Academy Practice: Displaying and describing data
```
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 154               | On Grade Level       | Lesson 37-1 Dot Plots and Box Plots (p. 537)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 37-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 37-1 Practice (p. 541)  
**Learning Targets or Assessment Focus**  
[ ][ ] A1: S-ID.A.1  
| 155               | On Grade Level       | Lesson 37-2 Modified Box Plots (p. 543)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 37-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 37-2 Practice (p. 547)  
**Learning Targets or Assessment Focus**  
[ ][ ] A1: S-ID.A.1  
| 156               | On Grade Level       | Lesson 37-3 Normally Distributed (p. 548)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 37-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 37-3 Practice (p. 553)  
**Learning Targets or Assessment Focus**  
[ ][ ] A1: S-ID.A.1  
[ ][ ] A2: S-ID.A.4  
[ ][ ] A2: S-ID.A.4 |
| 157               | On Grade Level       | **Activity 37 Practice (p. 554)**  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 37. (p. 618)  
**Learning Targets or Assessment Focus**  
[ ][ ] A1: S-ID.A.1  
[ ][ ] A2: S-ID.A.4 |

**Key:** ■ Major Work, □ Supporting Work, ◇ Additional Work, ◆ Prerequisite Skill
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 158                | On Grade Level       | **Embedded Assessment 1**–Comparing Univariate Distributions (p. 557)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 1–Comparing Univariate Distributions (p. 618)  
• Consider **Unpacking Embedded Assessment 2**–Bivariate Distributions (p. 609) during this time.  
|                    |                      | ![Khan Academy Logo](https://example.com/khan-academy.png) | **A1: S-ID.A.1**  
**A1: S-ID.A.2**  
**A1: S-ID.A.3** | Assessment Focus:  
• Visual comparison of univariate graphical displays  
• Computational comparisons of center and spread  
• Computing specific measures of center and spread (including five-number summary)  
• Determining outliers  
• Creating modified box plots  
• Determining appropriate measures of variability  

**Continue the Khan Academy Algebra Mission.**  
View Khan Academy Videos:  
- Reading box plots  
- Constructing a box plot  
- Range and mid-range  
- Introduction to the normal distribution  
Khan Academy Practice: Displaying and describing data |
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
  • Describing a bivariate numerical relationship and associating that description with a correlation coefficient  
  • Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations  
  • Reading a two-way table  
  • Creating row percentages  
  • Developing a segmented bar graph  
  • Analyzing row percentages and segmented bar graphs to investigate association |
| 160                | On Grade Level       | **Lesson 38-1** Scatter Plots (p. 559)  
  **Formative Assessment, Differentiation, and Practice**  
  1. Lesson 38-1 Short Cycle Assessment (SBD)  
  2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
  3. Lesson 38-1 Practice (p. 563) | □ A1: S-ID.C.8 |  
  • Describe a linear relationship between two numerical variables in terms of direction and strength.  
  • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables. |
| 161                | On Grade Level       | **Lesson 38-2** Correlation Coefficient (p. 564)  
  **Formative Assessment, Differentiation, and Practice**  
  1. Lesson 38-2 Short Cycle Assessment (SBD)  
  2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
  • Calculate correlation.  
  • Distinguish between correlation and causation. |
|                    |                      | **Activity 38** Practice (p. 569)  
  • Describe a linear relationship between two numerical variables in terms of direction and strength.  
  • Use the correlation coefficient to describe the strength and direction of a linear relationship between two numerical variables.  
  • Calculate correlation.  
  • Distinguish between correlation and causation. |

Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos: [Constructing a scatter plot](#)  
[Correlation and causality](#)  
[Khan Academy Practice: Describing relationships in quantitative data](#)
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 162                | On Grade Level       | **Lesson 39-1** Line of Best Fit (p. 571)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 39-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
• Use the equation of the best-fit line to make predictions and compare the predictions to actual values. |
| 163                | On Grade Level       | **Lesson 39-2** Residuals (p. 577)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 39-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 39-2 Practice (p. 581) | [A1: S-ID.B.6](https://example.com) | • Use technology to determine the equation of the best-fit line.  
• Describe the linear relationship between two numerical variables using the best-fit line.  
• Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables. |
| 164                | On Grade Level       | **Lesson 39-3** Interpreting the Slope and Intercept of the Best-Fit Line (p. 582)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 39-3 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 39-3 Practice (p. 587) | [A1: S-ID.B.6](https://example.com) | • Interpret the slope of the best-fit line in the context of the data.  
• Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear. |
| 165                | On Grade Level       | **Lesson 39-4** Plotting Residuals (p. 588)  
**Formative Assessment, Differentiation, and Practice**  
1. Lesson 39-4 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
3. Lesson 39-4 Practice (p. 593) | [A1: S-ID.B.6](https://example.com) | • Create a residual plot given a set of data and the equation of the best-fit line.  
• Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables. |
### Activity 39

**Unit 6: Probability and Statistics**

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

<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 166                | On Grade Level       | Activity 39 Practice (p. 594)  
- Describe the linear relationship between two numerical variables using the best-fit line.  
- Use the equation of the best-fit line to make predictions and compare the predictions to actual values.  
- Use technology to determine the equation of the best-fit line.  
- Describe the linear relationship between two numerical variables using the best-fit line.  
- Use residuals to investigate whether a given line is an appropriate model of the relationship between numerical variables.  
- Interpret the slope of the best-fit line in the context of the data.  
- Distinguish between scatter plots that show a linear relationship and those where the relationship is not linear.  
- Create a residual plot given a set of data and the equation of the best-fit line.  
- Use residuals to investigate whether a line is an appropriate description of the relationship between numerical variables. |

**Khan Academy**
- Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos:  
- Fitting a line to data  
- Estimating the line of best fit exercise  
- Comparing models to fit data example  
- Interpreting a trend line  

**Khan Academy Practice:** Describing relationships in quantitative data

---

**Key:**  ■ Major Work,  □ Supporting Work,  ● Additional Work,  ◆ Prerequisite Skill

---

61
<table>
<thead>
<tr>
<th>Day of Instruction</th>
<th>Level of Instruction</th>
<th>Instructional Focus</th>
<th>Louisiana Student Standard(s)</th>
<th>Learning Targets or Assessment Focus</th>
</tr>
</thead>
</table>
| 167                | On Grade Level       | Lesson 40-1 Bivariate Categorical Data (p. 595)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 40-1 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
• Interpret frequencies and relative frequencies in two-way tables. |
| 168                | On Grade Level       | Lesson 40-2 Presenting Relative Frequency Data Graphically (p. 600)  
Formative Assessment, Differentiation, and Practice  
1. Lesson 40-2 Short Cycle Assessment (SBD)  
2. Individual or Small Group Assignments (Skills Workshop p. xvi or Khan Academy Practice p. xxii)  
• Recognize and describe patterns of association in two-way tables. |
| 169                | On Grade Level       | Activity 40 Practice  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Activity 40. (p. 618) | A1: S-ID.B.5 | • Summarize bivariate categorical data in a two-way frequency table.  
• Interpret frequencies and relative frequencies in two-way tables.  
• Interpret frequencies and relative frequencies in two-way tables.  
• Recognize and describe patterns of association in two-way tables. |
| 170                | On Grade Level       | Embedded Assessment 2– Bivariate Distributions (p. 557)  
• Use SpringBoard Learning Strategy to engage students in reflection of the work of Embedded Assessment 2– Bivariate Distributions (p. 618) | A1: S-ID.B.5  
A1: S-ID.B.6  
A1: S-ID.C.7  
A1: S-ID.C.8 | • Describing a bivariate numerical relationship and associating that description with a correlation coefficient  
• Developing a linear model, interpreting its components, using the model for prediction, and recognizing its limitations  
• Reading a two-way table  
• Creating row percentages  
• Developing a segmented bar graph  
• Analyzing row percentages and segmented bar graphs to investigate association |
| 171                | On Grade Level       | End-of-Unit 6 Assessment (SBD) | Assesses A1 standards covered in the unit. | Continue the Khan Academy Algebra Mission.  
View Khan Academy Videos: Two-way frequency tables and Venn diagrams  
Two-way relative frequency tables  
Interpreting two way tables  
Analyzing trends in categorical data  
Khan Academy Practice: Describing relationships in quantitative data |