

# California Math Curriculum Pacing Guide Grade 8

	Week 1	Week 2
<b>Domain 1: The Number System</b>		
<b>Day 1</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 1: Understanding Rational and Irrational Numbers</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 18–19; 20 min.</li> <li>● <i>EL Adaptations Lesson 1</i></li> </ul> <p><b>Before the Lesson</b>            See Before the Lesson, and continue a review of the different sets of numbers—whole numbers, integers, rational numbers, and irrational numbers. Explain how each set is related to each other.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 2–3 <b>PLUG IN: Build Background.</b> 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 2: Estimating the Value of Irrational Expressions</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 20–21; 20 min.</li> <li>● <i>EL Adaptations Lesson 2</i></li> </ul> <p><b>Before the Lesson</b>            Carefully explain the discussion about why the squares of 2 and 3 are the two integers that will get the approximation started in the Before The Lesson. Choosing the right integers to approximate can save a great deal of time. Calculators are essential throughout this Lesson.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 6–9 for <b>READY TO GO: Build Background.</b> 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
<b>Day 2</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 1: Understanding Rational and Irrational Numbers</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 18–19; 30 min.</li> <li>● <i>EL Adaptations Lesson 1</i></li> </ul> <p><b>Understand-Connect</b>            Explain the definitions of the different sets of numbers. Expand on the diagram of the set of <i>real numbers</i> shown on the Understand page. You can add additional examples that explain the language of the number systems.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 2–3 for <b>PLUG IN: Introduce and Model.</b> 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 2: Estimating the Value of Irrational Expressions</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 20–21; 25 min.</li> <li>● <i>EL Adaptations Lesson 2</i></li> </ul> <p><b>Understand</b>            Carefully explain the discussion in Connect about why the squares of 3.4 and 3.5 were chosen in the Before The Lesson. Choosing the right decimals to approximate can save a great deal of time. Calculators are essential.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 6–9 for <b>READY TO GO: Introduce and Model.</b> 15 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
<b>Day 3</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 1: Understanding Rational and Irrational Numbers</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 18–19; 30 min.</li> <li>● <i>EL Adaptations Lesson 1</i></li> </ul> <p><b>Example A Example B</b>            See EL note on p. 2 of <i>Common Core Support Coach Teacher's Manual</i>. Explain the connection between decimals and fractions. Review the solving of equations.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 4–5 for <b>POWER UP: Build Background.</b> 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 2: Estimating the Value of Irrational Expressions</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 20–21; 25 min.</li> <li>● <i>EL Adaptations Lesson 2</i></li> </ul> <p><b>Connect</b>            Discuss why 2 and 3 are chosen; and why the sequence in Step 2 begins with 2.6. Make sure all language here is clear. See useful EL note on page 6 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 6–9 for <b>READY TO GO: Work Together (A, B).</b> 15 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
<b>Day 4</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 1: Understanding Rational and Irrational Numbers</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 18–19; 30 min.</li> <li>● <i>EL Adaptations Lesson 1</i></li> </ul> <p><b>Example C</b>            Help students get started with TRY, bottom of Example C.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 4–5 for <b>POWER UP: Introduce and Model.</b> 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 2: Estimating the Value of Irrational Expressions</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 20–21; 30 min.</li> <li>● <i>EL Adaptations Lesson 2</i></li> </ul> <p><b>Practice</b>            Begin Practice by explaining what is required for each section. Use your calculator as often as you need to. The Observation-Action chart on p. 9 should help detect problems and help solve them.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 6–9 for <b>READY TO GO: Support Independent Practice. Extra challenges: see Questions 18 and 19 of Common Core Coach.</b> 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
<b>Day 5</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 1: Understanding Rational and Irrational Numbers</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 18–19; 30 min.</li> <li>● <i>EL Adaptations Lesson 1</i></li> </ul> <p><b>Practice</b>            See EL note on p. 4 of <i>Common Core Support Coach Teacher's Manual</i>. Make sure each section of Practice is clear.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 12–13 for <b>POWER UP: Practice and Assess. Extra challenges: see Questions 25 and 26 of Common Core Coach.</b> 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 1 Review</b></p> <ul style="list-style-type: none"> <li>● <i>Student Edition</i> pp. 16–17; 40 min.</li> <li>● <i>Teacher's Manual</i> p. 91</li> </ul> <p><b>Questions 1–20</b>            Go over the questions and discuss. Ask students to take a look at instructions on these pages, the first half of the Review. Make sure all instructions are clear. See Progression Chart on pp. 16–17 (<i>Teacher's Manual</i>) for a view of progressions connecting the Lessons of Domain 1.</p> <p><b>Differentiation Options</b>            Ask students to do a single page at a time, and then go over the questions.</p>

	Week 3	Week 4
Day 1	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 1 Review</b></p> <ul style="list-style-type: none"> <li>• Student Edition pp. 18–19; 40 min.</li> <li>• Teacher's Manual p. 91</li> </ul> <p><b>Questions 21–34 &amp; Performance Task</b>  Go over the questions and discuss. Pay special attention to the Performance Task on p. 19. Ask students to take a look at instructions on these pages, the second half of the Review. In particular, clarify any doubts with respect to Performance Task (<i>Approximating Circumference</i>) on p. 19. See Progression Chart on pp. 16–17 (<i>Teacher's Manual</i>) for a view of progressions connecting the Lessons of Domain 1.</p> <p><b>Differentiation Options</b>  Ask students to do a single page at a time, and then go over the questions. Note extra challenges: Questions 33 and 34.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 3: Applying Properties of Exponents</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 24–25; 30 min.</li> <li>• EL Adaptations Lesson 3</li> </ul> <p><b>Practice</b>  Every section here needs to be clearly understood even if the problems look simple. They are not.</p> <p><b>Differentiation Options</b>  Check Understanding  Choose odd questions and ask students to explain how they got their answers to these. This will allow for an opportunity to see how much understanding students have of what looks like a set of easy questions. Note extra challenges: Questions 27 and 28. 10 min.</p> <ul style="list-style-type: none"> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 1 Assessment</b></p> <ul style="list-style-type: none"> <li>• Assessments pp. 4–11; 40 min.</li> <li>• Assessments Answer Keys pp. 4–5</li> </ul> <p><b>Questions 1–20</b>  Provide extra time for assessments and provide readers to read word problems to students.</p> <p><b>Differentiation Options</b>  Provide extra time and assistance for students who qualify. Since Domain 1 is short (only two lessons), Domain 1 Assessment is short and takes only one day. All other Domain Assessments take two days.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 4: Understanding Square and Cube Roots</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 25–26; 25 min.</li> <li>• EL Adaptations Lesson 4</li> </ul> <p><b>Before the Lesson</b>  Make sure students are acquainted with square roots of numbers; review square roots of square numbers so they have a feeling for inverses. See Before the Lesson.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Common Core Support Coach Teacher's Manual pp. 10–11 for PLUG IN: Build Background. 15 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Domain 2: Expressions and Equations</b></p>	
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 3: Applying Properties of Exponents</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 24–25; 20 min.</li> <li>• EL Adaptations Lesson 3</li> </ul> <p><b>Before the Lesson</b>  See Before the Lesson. Make sure to reinforce the two words base and exponent asking students to show examples of each one.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Understanding Exponentiation Break down all exponential expressions to their meaning, e.g., <math>7^3 = 7 \times 7 \times 7</math>; and start with repeated multiplication to write an exponential expression, e.g., <math>2 \times 2 \times 2 \times 2 \times 2 = 2^5</math>. 20 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 4: Understanding Square and Cube Roots</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 25–26; 25 min.</li> <li>• EL Adaptations Lesson 4</li> </ul> <p><b>Understand</b>  Go over critical vocabulary and distinguish between <i>principal square root</i> and <i>square root</i>. Alert students to the Glossary where they can find definitions of all words used in the Lessons.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Common Core Support Coach Teacher's Manual pp. 12–13 for POWER UP: Build Background. 15 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 3: Applying Properties of Exponents</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 24–25; 30 min.</li> <li>• EL Adaptations Lesson 3</li> </ul> <p><b>Understand</b>  On the Understand page, make note that the diagram shows two paths, one with a positive exponent, and one with a negative exponent. Point out the differences down both columns.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Exponent Expression Cards Hand out index cards with a variety of exercises about positive and negative exponents, working both ways from expression to multiplication/division and reverse. If these are ordered in some way by difficulty then they can serve to advance students from easier to more difficult computations and understandings. 10 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 4: Understanding Square and Cube Roots</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 25–26; 25 min.</li> <li>• EL Adaptations Lesson 4</li> </ul> <p><b>Connect</b>  Move through each of the first two steps at the top carefully; repeat the same steps with another example. Do the same with the cubic equation.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Common Core Support Coach Teacher's Manual pp. 12–13 for POWER UP: Introduce and Model. 15 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 3: Applying Properties of Exponents</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 24–25; 30 min.</li> <li>• EL Adaptations Lesson 3</li> </ul> <p><b>Connect</b>  The Connect page shows the rules of multiplying and dividing two exponential expressions that have the same bases. Explain these carefully.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Exponent Expression Cards Hand out index cards with a variety of exercises applying the rules for multiplying and dividing exponential expressions. If ordered in some way by difficulty then these cards can serve to advance students from easier to more difficult computations and understandings. 10 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 4: Understanding Square and Cube Roots</b></p> <ul style="list-style-type: none"> <li>• Teacher's Manual pp. 25–26; 30 min.</li> <li>• EL Adaptations Lesson 4</li> </ul> <p><b>Practice</b>  It is important to read these questions to students so that each one is clear and understood before students get started. A designated appropriate reader among the students might work.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>• Common Core Support Coach Teacher's Manual pp. 14–17 for READY TO GO: Support Independent Practice (1–8). Extra challenges: see Questions 30 and 31 of Common Core Coach 10 min.</li> <li>• Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 5	Week 6
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 5: Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 28–29; 20 min.</li> <li>EL Adaptations Lesson 5</li> </ul> <p><b>Before the Lesson</b>  See Before the Lesson. Accent powers of 10 (positive and negative exponents) and their decimal representation with examples. Make sure the vocabulary is understood.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 18–19 for PLUG IN: Build Background. 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 6: Using Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 30–31; 25 min.</li> <li>EL Adaptations Lesson 6</li> </ul> <p><b>Example C Example D</b>  Notice the use of calculator in Examples C and D. Students should be encouraged to use them. Make sure they can read answers.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 22–25 for READY TO GO: Work Together (A). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 5: Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 28–29; 30 min.</li> <li>EL Adaptations Lesson 5</li> </ul> <p><b>Understand</b>  The essence of scientific notation is explained here, so walk through each step, even reading what is on this page and expanding on the main points. Review <i>coefficient</i>. Add further examples as necessary.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 20–21 for POWER UP: Model Application (A). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 6: Using Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 30–31; 25 min.</li> <li>EL Adaptations Lesson 6</li> </ul> <p><b>Example E</b>  Check to see if students can look at a number in <i>scientific notation</i> and interpret it as being less than or greater than a fixed number such as 1,000,000.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 22–25 for READY TO GO: Work Together (B). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 5: Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 28–29; 20 min.</li> <li>EL Adaptations Lesson 5</li> </ul> <p><b>Connect</b>  Make sure these word problems are clear, and students understand what needs to be done. This page deals with <i>how many times</i> as in comparisons, and introduces dividing two numbers in scientific notation (See Lesson 6). See advice on EL, p. 21 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 20–21 for POWER UP: Model Application (B). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 6: Using Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 30–31; 25 min.</li> <li>EL Adaptations Lesson 6</li> </ul> <p><b>Problem Solving</b>  Read the problem to students and make sure each step is clear. See p. 24 of <i>Common Core Support Coach Teacher's Manual</i> for a useful advice for EL.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 22–25 for READY TO GO: Problem Solving. 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 5: Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 28–29; 30 min.</li> <li>EL Adaptations Lesson 5</li> </ul> <p><b>Practice</b>  You may want to ask students to do the Practice in stages, reviewing each section before moving forward. See advice on EL, p. 23 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 20–21 for POWER UP: Practice and Assess. Extra challenges: see Questions 23 and 24 on p. 33 of <i>Common Core Coach</i>. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 6: Using Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 30–31; 25 min.</li> <li>EL Adaptations Lesson 6</li> </ul> <p><b>Practice</b>  It is never too late to make sure – see Spotlight on Mathematical Language on p. 21 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 22–25 for READY TO GO: Support Independent Practice (1–6). Extra challenges: see Questions 22 and 23 on p. 39 of <i>Common Core Coach</i>. 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 6: Using Scientific Notation</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 30–31; 20 min.</li> <li>EL Adaptations Lesson 6</li> </ul> <p><b>Example A Example B</b>  See Before Lesson for advice on reviewing properties, as they are used when multiplying and dividing. See Example A for an application.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 22–25 for READY TO GO: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 7: Representing and Interpreting Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 32–33; 20 min.</li> <li>EL Adaptations Lesson 7</li> </ul> <p><b>Understand</b>  Check out the word list on p. 32 of <i>Teacher's Manual</i> to make sure understand each word.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 26–27 for PLUG IN: Model and Application (A). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 7	Week 8
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 7: Representing and Interpreting Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 32–33; 20 min.</li> <li>EL Adaptations Lesson 7</li> </ul> <p><b>Connect</b>  Review each word of the word list on p. 32 of <i>Common Core Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 26–27 for PLUG IN: Model and Application (B). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 8: Relating Slope and y-intercept to Linear Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 34–35; 25 min.</li> <li>EL Adaptations Lesson 8</li> </ul> <p><b>Connect</b>  Ask: what is <i>slope</i> of a line? Explain that it is equal to the constant of proportionality or rate of change. See advice for EL, p. 34 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation wOptions</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 36–37 for POWER UP: Model Application (A). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 7: Representing and Interpreting Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 32–33; 25 min.</li> <li>EL Adaptations Lesson 7</li> </ul> <p><b>Example A</b>  See p. 26 of <i>Common Core Support Coach Teacher's Manual</i> for a useful tip on slope.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 28–29 for POWER UP: Model and Application (A). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 8: Relating Slope and y-intercept to Linear Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 34–35; 25 min.</li> <li>EL Adaptations Lesson 8</li> </ul> <p><b>Example</b>  See p. 36 of <i>Common Core Support Coach Teacher's Manual</i> for a useful tip for EL.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 36–37 for POWER UP: Model Application (B). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 7: Representing and Interpreting Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 32–33; 30 min.</li> <li>EL Adaptations Lesson 7</li> </ul> <p><b>Example B</b>  To illustrate the data more vividly, ask students to draw a graph for the Cost of Gasoline. Ask students to look at the graph and answer the question of the Example?</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 28–29 for POWER UP: Model and Application (B). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 8: Relating Slope and y-intercept to Linear Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 34–35; 30 min.</li> <li>EL Adaptations Lesson 8</li> </ul> <p><b>Problem Solving</b>  Remind students of the 4–step process for solving problems. See p. 38 of <i>Common Core Support Coach Teacher's Manual</i> for a useful tip for EL.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 38–41 for READY TO GO: Problem Solving. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 7: Representing and Interpreting Proportional Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 32–33; 30 min.</li> <li>EL Adaptations Lesson 7</li> </ul> <p><b>Practice</b>  Explain all parts of Practice and work out Questions that are not clear to students. You can always use a Practice to diagnose progress and difficulties.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 28–29 for POWER UP: Practice and Assess. Extra challenge: see Question 8 of <i>Common Core Coach</i>. 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 8: Relating Slope and y-intercept to Linear Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 34–35; 30 min.</li> <li>EL Adaptations Lesson 8</li> </ul> <p><b>Practice</b>  Each section asks different questions, so be prepared to instruct students on what is coming for each section of Practice.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 38–41 for READY TO GO: Practice and Assess. Extra challenge: See p. 51, Questions 15 and 16 of <i>Common Core Coach</i>. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 8: Relating Slope and y-intercept to Linear Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 34–35; 25 min.</li> <li>EL Adaptations Lesson 8</li> </ul> <p><b>Understand</b>  Go over all steps slowly and carefully as there is much here. Make sure the idea of the difference in y values divided by the difference in x values makes sense in terms of rate of change.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 36–37 for POWER UP: Introduce and Model. 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 9: Solving Equations in One Variable</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 35–36; 20 min.</li> <li>EL Adaptations Lesson 9</li> </ul> <p><b>Before the Lesson</b>  This time solving takes two steps, so show examples of one-step and two-step solutions so this difference is clear. Actually, there are often a few preliminary steps that are not counted, such as combining like terms, or rearranging terms.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 44–45 for POWER UP: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 9	Week 10
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 9: Solving Equations in One Variable</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 35–36; 30 min.</li> <li>● <i>EL Adaptations Lesson 9</i></li> </ul> <p><b>Understand</b>  Before any solving takes place, equations have to be simplified. Ask: what are <i>like terms</i>? Help students follow the string of steps on the way to solution.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 44–45 for <b>POWER UP: Introduce and Model</b>. 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 10: Solving Systems of Two Linear Equations Graphically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 38–39; 30 min.</li> <li>● <i>EL Adaptations Lesson 10</i></li> </ul> <p><b>Example A</b>  Show students each step of Example A, and explain why there is no solution.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 50–51 for <b>PLUG IN: Model Application (A)</b>. 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 9: Solving Equations in One Variable</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 35–36; 30 min.</li> <li>● <i>EL Adaptations Lesson 9</i></li> </ul> <p><b>Connect</b>  See p. 44 of <i>Common Core Support Coach Teacher's Manual</i> for useful EL advice. There are two separate equations to solve here, both dealing with simplifying and combining terms. At the end, there are surprises in both cases – one equation has infinitely many solutions; and a second equation has no solution. Explain how this comes about.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 44–45 for <b>POWER UP: Model Application (A, B)</b>. 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 10: Solving Systems of Two Linear Equations Graphically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 38–39; 30 min.</li> <li>● <i>EL Adaptations Lesson 10</i></li> </ul> <p><b>Example B</b>  Show students each step of Example B, and explain why there are infinitely many solutions.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 50–51 for <b>PLUG IN: Support Discussion</b>. 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 9: Solving Equations in One Variable</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 35–36; 30 min.</li> <li>● <i>EL Adaptations Lesson 9</i></li> </ul> <p><b>Practice</b>  Have students do a section at a time, and then review their work before moving forward to the next section.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 44–45 for <b>POWER UP: Practice and Assess</b>. <i>Extra challenge: Questions 15 and 16 of Common Core Coach</i>. 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 10: Solving Systems of Two Linear Equations Graphically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 38–39; 30 min.</li> <li>● <i>EL Adaptations Lesson 10</i></li> </ul> <p><b>Practice</b>  Ask students work out answers to each section, then go over that section and answers questions. Then move to the next section.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 50–51 for <b>PLUG IN: Practice and Assess</b>. <i>Extra challenge: Question 19 of Common Core Coach</i>. 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 10: Solving Systems of Two Linear Equations Graphically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 38–39; 30 min.</li> <li>● <i>EL Adaptations Lesson 10</i></li> </ul> <p><b>Understand</b>  Warn students that there may not be any solution, or possibly, an infinite number of solutions. See p. 50 of <i>Common Core Support Coach Teacher's Manual</i> for <i>Spotlight on Mathematical Practices</i>, good advice for all students. Remember, two equations intersecting means an ordered pair, not a single number. Explain the concept of coincident lines.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 50–51 for <b>PLUG IN: Build Background</b>. 10 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 11: Solving Systems of Two Linear Equations Algebraically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 40–41; 25 min.</li> <li>● <i>EL Adaptations Lesson 11</i></li> </ul> <p><b>Example A</b>  To understand how to solve a system of equations, students will have to be very careful as there are many steps involved. Carefully show each step of Example A.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 52–53 for <b>POWER UP: Build Background</b>. 15 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 10: Solving Systems of Two Linear Equations Graphically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 38–39; 30 min.</li> <li>● <i>EL Adaptations Lesson 10</i></li> </ul> <p><b>Connect</b>  Advise students that it is a good idea to check the solution. See p. 51 of <i>Common Core Support Coach Teacher's Manual</i> for useful EL advice.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 50–51 for <b>PLUG IN: Introduce Concepts and Vocabulary</b>. 20 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 11: Solving Systems of Two Linear Equations Algebraically</b></p> <ul style="list-style-type: none"> <li>● <i>Teacher's Manual</i> pp. 40–41; 25 min.</li> <li>● <i>EL Adaptations Lesson 11</i></li> </ul> <p><b>Example B</b>  The method of both Example A and Example B is the same, called elimination, meaning eliminating a variable.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>● <i>Common Core Support Coach Teacher's Manual</i> pp. 52–53 for <b>POWER UP: Introduce and Model</b>. 15 min.</li> <li>● <i>Readiness for Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 11	Week 12
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 11: Solving Systems of Two Linear Equations Algebraically</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 40–41; 25 min.</li> <li>EL Adaptations Lesson 11</li> </ul> <p><b>Example C</b>            Another way to solve a system is by substitution, and students need to understand how to do both methods. Make sure students practice with a variety of equations.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 52–53 for POWER UP: Model Application (A). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 12: Problem Solving: Using Systems of Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 42–43; 30 min.</li> <li>EL Adaptations Lesson 12</li> </ul> <p><b>Ralph's Deli</b>            Help students decipher the reasons why each equation is chosen for the system of equations. Remind students to think of translating words into algebraic expressions. See p. 55 of <i>Coach Teacher's Manual</i> for useful EL advice.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 54–57 for READY TO GO: Work Together (A). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 11: Solving Systems of Two Linear Equations Algebraically</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 40–41; 25 min.</li> <li>EL Adaptations Lesson 11</li> </ul> <p><b>Example D</b>            Advise students: do not rush through this Example as it is tricky. Help students throughout this Example, step by step.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 52–53 for POWER UP: Model Application (B). 15 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 12: Problem Solving: Using Systems of Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 42–43; 20 min.</li> <li>EL Adaptations Lesson 12</li> </ul> <p><b>Practice</b>            Read as much of each problem as is necessary to make sure students understand what needs to be done, then help with the writing of equations. Follow the 4–step process for solving problems.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 54–57 for READY TO GO: Support Independent Practice (1–7). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 11: Solving Systems of Two Linear Equations Algebraically</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 40–41; 30 min.</li> <li>EL Adaptations Lesson 11</li> </ul> <p><b>Practice</b>            Advise students: do not rush through these Questions, and try to make sure that all work is done carefully as there are so many opportunities for error.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 52–53 for POWER UP: Build Background. Extra challenge: Questions 15 and 16 of Common Core Coach. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 2 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 72–73; 40 min.</li> <li>Teacher's Manual pp. 97–98</li> </ul> <p><b>Questions 1–21</b>            Go over the questions and discuss. Ask students to take a look at instructions on these pages, the first half of the Review. Make sure all instructions are clear. See Progression Chart on pp. 22–23 (Teacher's Manual) for a view of progressions connecting the Lessons of Domain 2.</p> <p><b>Differentiation Options</b>            Ask students to do a single page at a time, and then go over the questions.</p>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 12: Problem Solving: Using Systems of Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 42–43; 20 min.</li> <li>EL Adaptations Lesson 12</li> </ul> <p><b>Before the Lesson</b>            Go over the ways to solve systems of equations. (These are basically found in Lessons 10 and 11.) Review with examples, again asking students to be careful with the variety of moves necessary that can easily lead to error.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 54–57 for READY TO GO: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 2 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 74–75; 40 min.</li> <li>Teacher's Manual p. 98</li> </ul> <p><b>Questions 22–30 &amp; Performance Task</b>            Go over the questions and discuss. Pay special attention to the Performance Task on p. 75. Ask students to take a look at instructions on these pages, the second half of the Review. In particular, clarify any doubts with respect to Performance Task (<i>Classroom Measurements</i>) on p. 75. See Progression Chart on pp. 22–23 (Teacher's Manual) for a view of progressions connecting the Lessons of Domain 2.</p> <p><b>Differentiation Options</b>            Ask students to do a single page at a time, and then go over the questions. Note extra challenges: Questions 29 and 30.</p>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 12: Problem Solving: Using Systems of Equations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 42–43; 30 min.</li> <li>EL Adaptations Lesson 12</li> </ul> <p><b>Nina's Wallet</b>            Help with the writing of the equations after students understand what needs to be done to find a solution to the problem. Then help solving the equations making each step clear.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 54–57 for READY TO GO: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 2 Assessment</b></p> <ul style="list-style-type: none"> <li>Assessments pp. 12–17; 40 min.</li> <li>Assessments Answer Keys p. 6</li> </ul> <p><b>Questions 1–25</b>            Provide extra time for assessments and provide readers to read word problems to students.</p> <p><b>Differentiation Options</b>            Provide extra time and assistance for students who qualify.</p>

## Week 13

## Week 14

Day 1

### Review and Assess

#### **Common Core Coach** **Domain 2 Assessment**

- Assessments pp. 18–21; 40 min.
- Assessments Answer Keys pp. 6–8

#### Questions 26–30

Provide clear explanation of questions.

#### Differentiation Options

Provide extra time and assistance for students who qualify.

### Lesson Focus

#### **Common Core Coach Lesson 14: Comparing Functions Represented in Different Ways**

- Teacher's Manual pp. 48–49; 20 min.
- EL Adaptations Lesson 14

#### Before the Lesson

See Before the Lesson. Add practice with additional linear equations, so that students get to see the connection with equations, graphs, and tables.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 70–73 for READY TO GO. Build Background. 20 min.
- Readiness for Common Core [below level](#) [above level](#)

Day 2

## Domain 3: Functions

### Lesson Focus

#### **Common Core Coach Lesson 13: Introducing Functions**

- Teacher's Manual pp. 46–47; 20 min.
- EL Adaptations Lesson 13

#### Before the Lesson

See Before the Lesson. Ask students to think of additional examples of where a single input yields a single output. This is in contrast to situations where a single input yields many outputs.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 58–59 for PLUG IN. Build Background. 20 min.
- Readiness for Common Core [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 14: Comparing Functions Represented in Different Ways**

- Teacher's Manual pp. 48–49; 30 min.
- EL Adaptations Lesson 14

#### Understand

Review key words such as *slope* and *intercept*. This *Understand* affords a good example of how the three representations work together.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 70–73 for READY TO GO. Introduce and Model. 10 min.
- Readiness for Common Core [below level](#) [above level](#)

Day 3

### Lesson Focus

#### **Common Core Coach Lesson 13: Introducing Functions**

- Teacher's Manual pp. 46–47; 20 min.
- EL Adaptations Lesson 13

#### Understand

Distinguish between relation and function. See p. 58 of *Common Core Support Coach Teacher's Manual* for useful EL advice.

#### Differentiation Options

- Add additional practice in recognizing relations that are not functions. Common Core Support Coach Teacher's Manual pp. 58–59 for PLUG IN. Model Application (A). 20 min.
- Readiness for Common Core [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 14: Comparing Functions Represented in Different Ways**

- Teacher's Manual pp. 48–49; 30 min.
- EL Adaptations Lesson 14

#### Connect

In *Understand*, there is an opportunity to study two functions represented differently. Follow through with the TRY, but move slowly.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 70–73 for READY TO GO. Work Together. 10 min.
- Readiness for Common Core [below level](#) [above level](#)

Day 4

### Lesson Focus

#### **Common Core Coach Lesson 13: Introducing Functions**

- Teacher's Manual pp. 46–47; 30 min.
- EL Adaptations Lesson 13

#### Connect

Make this clear: The equation here is not standard as it uses  $+/-$  indicating that both the positive and negative values are included. Make sure the vertical line test makes sense.

#### Differentiation Options

- Understanding why the vertical line test works is key here, so provide additional examples. Common Core Support Coach Teacher's Manual pp. 58–59 for PLUG IN. Model Application (B). 10 min.
- Readiness for Common Core [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 14: Comparing Functions Represented in Different Ways**

- Teacher's Manual pp. 48–49; 30 min.
- EL Adaptations Lesson 14

#### Practice

Review rate of change before students start on Practice. See p. 70 of *Common Core Support Coach Teacher's Manual* for useful suggestions for EL.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 70–73 for READY TO GO. Support Independent Practice. Extra challenge: Questions 6 and 7 of Common Core Coach. 10 min.
- Readiness for Common Core [below level](#) [above level](#)

Day 5

### Lesson Focus

#### **Common Core Coach Lesson 13: Introducing Functions**

- Teacher's Manual pp. 46–47; 30 min.
- EL Adaptations Lesson 13

#### Practice

Make sure students can distinguish between relations and functions. See Questions 1–6. Provide assistance with reading and interpreting Questions.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 58–59 for PLUG IN. Practice and Assess. Extra challenge: Questions 11 and 12 of Common Core Coach. 10 min.
- Readiness for Common Core [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 15: Linear and Nonlinear Functions**

- Teacher's Manual pp. 50–51; 20 min.
- EL Adaptations Lesson 15

#### Before the Lesson

See Before the Lesson. Review how to plot a function on a graph. Literally do this on graph paper, and make sure students know where to place each point.

#### Differentiation Options

- Common Core Support Coach Teacher's Manual pp. 58–59 for PLUG IN: Build Background. 20 min.
- Readiness for Common Core [below level](#) [above level](#)

## Week 15

## Week 16

Day 1

### Lesson Focus

#### **Common Core Coach Lesson 15: Linear and Nonlinear Functions**

- *Teacher's Manual* pp. 50–51; 20 min.
- *EL Adaptations Lesson 15*

### Understand

Do students understand the difference between linear and nonlinear functions, and can they explain the difference with examples?

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 58–59 for *PLUG IN: Introduce Concepts and Vocabulary*. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 16: Using Functions to Model Relationships**

- *Teacher's Manual* pp. 52–53; 30 min.
- *EL Adaptations Lesson 16*

### Example B

This Example starts with a table and asks for the rate of change, and uses a graph to check the answer. All of that needs to be clear, so ask students to do a similar example using a real world setting.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 62–65 for *READY TO GO: Work Together (A)*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

Day 2

### Lesson Focus

#### **Common Core Coach Lesson 15: Linear and Nonlinear Functions**

- *Teacher's Manual* pp. 50–51; 20 min.
- *EL Adaptations Lesson 15*

### Connect

See p. 58 of *Common Core Support Coach Teacher's Manual* for useful suggestions for EL.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 58–59 for *PLUG IN: Model Application (A, B)*. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 16: Using Functions to Model Relationships**

- *Teacher's Manual* pp. 52–53; 30 min.
- *EL Adaptations Lesson 16*

### Practice

Show students how to get started in each section. If necessary read out the directions and show an example to get the Practice started. Key vocabulary includes: rate of change, initial value, and intercept. See Question 14, which ties these together.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 62–65 for *READY TO GO: Support Independent Practice*. Extra challenge: Question 13 of *Common Core Coach*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

Day 3

### Lesson Focus

#### **Common Core Coach Lesson 15: Linear and Nonlinear Functions**

- *Teacher's Manual* pp. 50–51; 20 min.
- *EL Adaptations Lesson 15*

### Practice

Make sure all directions are clear. Ask: is it possible to look at an equation to see if it is linear or not?

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 58–59 for *PLUG IN: Practice and Assess*. Extra challenge: Questions 11–13 of *Common Core Coach*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 17: Describing Functional Relationships from Graphs**

- *Teacher's Manual* pp. 54–55; 20 min.
- *EL Adaptations Lesson 17*

### Before the Lesson

Do not forget the slope of a horizontal line and the slope of a vertical line. Explain these and show how the slope of a linear function moves from 0 through increasing values to “do not exist” to negative values as the graph moves counter-clockwise.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 66–67 for *PLUG IN: Build Background*. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

Day 4

### Lesson Focus

#### **Common Core Coach Lesson 16: Using Functions to Model Relationships**

- *Teacher's Manual* pp. 52–53; 20 min.
- *EL Adaptations Lesson 16*

### Before the Lesson

See Before the Lesson. A clear understanding of the connection between *rate of change* and *slope* will be helpful for this Lesson and going forward as these are key concepts in mathematics. Use a few examples showing tables, graphs, and equations.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 62–65 for *READY TO GO: Build Background*. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 17: Describing Functional Relationships from Graphs**

- *Teacher's Manual* pp. 54–55; 30 min.
- *EL Adaptations Lesson 17*

### Example A

See p. 67 of *Common Core Support Coach Teacher's Manual* for useful suggestions for EL. Explain piece-wise function, and show why the one shown is a function.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 66–67 for *PLUG IN: Model Application (A)*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

Day 5

### Lesson Focus

#### **Common Core Coach Lesson 16: Using Functions to Model Relationships**

- *Teacher's Manual* pp. 52–53; 30 min.
- *EL Adaptations Lesson 16*

### Example A

Support understanding of key vocabulary. See p. 62 of *Common Core Support Coach Teacher's Manual* for useful suggestions for EL. Read the problem with students and explain what is necessary to find the *rate of change*.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 62–65 for *READY TO GO: Introduce and Model*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

### Lesson Focus

#### **Common Core Coach Lesson 17: Describing Functional Relationships from Graphs**

- *Teacher's Manual* pp. 54–55; 30 min.
- *EL Adaptations Lesson 17*

### Example B

Here is another example of a nonlinear function, this being a quadratic function. Ask why all points are in Quadrant I. See Observation and Action at the bottom of p. 67 *Common Core Support Coach Teacher's Manual*.

### Differentiation Options

- *Common Core Support Coach Teacher's Manual* pp. 66–67 for *PLUG IN: Support Discussion*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)



**Week 17**

**Week 18**

<b>Day 1</b>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 17: Describing Functional Relationships from Graphs</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 54–55; 30 min.</li> <li>EL Adaptations Lesson 17</li> </ul> <p><b>Practice</b>                  After explaining how to get started on each section, monitor student work to make sure they are not off track. Work through Questions 6 and 7 to make sure all understand these.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 66–67 for PLUG IN: Practice and Assess. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Domain 4: Geometry</b></p> <p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 18: Properties of Rotations, Reflections, and Translations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 58–59; 40 min.</li> <li>EL Adaptations Lesson 18</li> </ul> <p><b>Before the Lesson</b></p> <ul style="list-style-type: none"> <li>Get ready for a new round of words. See Vocabulary. Go over each of these with the support of a good model: Use the section (3 of them) called Introduce and Model from Common Core Support Coach Teacher's Manual pp. 74–75, 82–83, and 90–91 for PLUG IN. These will provide concrete introductions to translation, reflection, and rotation.</li> </ul> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual – see above.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	
	<b>Day 2</b>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 3 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 98–99; 40 min.</li> <li>Teacher's Manual p. 101</li> </ul> <p><b>Questions 1–9</b>                  Go over the questions and discuss. Ask students to take a look at instructions on these pages, the first half of the Review. Make sure all instructions are clear. See Progression Chart on pp. 44–45 (Teacher's Manual) for a view of progressions connecting the Lessons of Domain 3.</p> <p><b>Differentiation Options</b>                  Ask students to do a single page at a time, and then go over the questions.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 18: Properties of Rotations, Reflections, and Translations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 58–59; 20 min.</li> <li>EL Adaptations Lesson 18</li> </ul> <p><b>Understand-Connect</b>                  Refer to the plan used on Day 1 of this Lesson; see the same references below. These pages can be used for a variety of students allowing for wide differentiation. Vocabulary and models are keys to moving forward.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 74–75, 82–83, and 90–91 for PLUG IN: Introduce and Model. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
	<b>Day 3</b>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 3 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 99–101; 40 min.</li> <li>Teacher's Manual pp. 101–102</li> </ul> <p><b>Questions 10–14 &amp; Performance Task</b>                  Go over the questions and discuss. Pay special attention to the Performance Task on p. 101. Ask students to take a look at instructions on these pages, the second half of the Review. In particular, clarify any doubts with respect to Performance Task (Describing Functions) on p. 101. See Progression Chart on pp. 44–45 (Teacher's Manual) for a view of progressions connecting the Lessons of Domain 3.</p> <p><b>Differentiation Options</b>                  Ask students to do a single page at a time, and then go over the questions.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 18: Properties of Rotations, Reflections, and Translations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 58–59; 20 min.</li> <li>EL Adaptations Lesson 18</li> </ul> <p><b>Example A</b>                  See the references below. These are from three PLUG IN sections (name is Support Discussion) of Common Core Support Coach Teacher's Manual, chosen to support Examples A and B. These sections are designed to create discussion in groups about the ideas and models of this Lesson.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 74–75, 82–83, and 90–91 for PLUG IN: Support Discussion. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
	<b>Day 4</b>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 3 Assessment</b></p> <ul style="list-style-type: none"> <li>Assessments pp. 22–28; 40 min.</li> <li>Assessments Answer Keys p. 9</li> </ul> <p><b>Questions 1–20</b>                  Provide extra time for assessments and provide readers to read word problems to students.</p> <p><b>Differentiation Options</b>                  Provide extra time and assistance for students who qualify.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 18: Properties of Rotations, Reflections, and Translations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 58–59; 20 min.</li> <li>EL Adaptations Lesson 18</li> </ul> <p><b>Example B</b>                  See the references below. These are from three PLUG IN sections (called Support Discussion) of Common Core Support Coach Teacher's Manual, chosen to support Examples A and B. These sections are designed to create discussion in groups about the ideas and models of this Lesson.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 74–75, 82–83, and 90–91 for PLUG IN: Support Discussion. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
	<b>Day 5</b>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 3 Assessment</b></p> <ul style="list-style-type: none"> <li>Assessments pp. 29–33; 40 min.</li> <li>Assessments Answer Keys pp. 9–11</li> </ul> <p><b>Questions 21–25</b>                  Provide clear explanation of questions.</p> <p><b>Differentiation Options</b>                  Provide extra time and assistance for students who qualify.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 18: Properties of Rotations, Reflections, and Translations</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 58–59; 30 min.</li> <li>EL Adaptations Lesson 18</li> </ul> <p><b>Practice</b>                  See p. 74, 82, and 90 of Common Core Support Coach Teacher's Manual for useful suggestions for EL. Guide students slowly through this practice, reminding them of the various characteristics of the rigid motions studied.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 74–75, 82–83, and 90–91 for PLUG IN: Practice and Assess. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 19	Week 20
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 19: Understanding Congruence of Two-Dimensional Figures (Using Rigid Motions)</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 60–61; 30 min.</li> <li>EL Adaptations Lesson 19</li> </ul> <p><b>Before the Lesson</b>  Start with an understanding of what is meant by <i>congruence</i> in many aspects, from models to real world objects to geometric figures. Review the three rigid motions already studied to insure that these are clear. See references below for additional activities.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 76–77, 84–85, and 92–93 for POWER UP: Build Background. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 20: Rigid Motion on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 62–63; 30 min.</li> <li>EL Adaptations Lesson 20</li> </ul> <p><b>Example B</b>  Make the generalization required and review this with another example.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 86–91 for READY TO GO: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 19: Understanding Congruence of Two-Dimensional Figures (Using Rigid Motions)</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 60–61; 30 min.</li> <li>EL Adaptations Lesson 19</li> </ul> <p><b>Understand</b>  Point out the two rigid motions of this Example to explain what is meant by two figures being <i>congruent</i>. The sections referenced below called <i>Introduce and Model</i> will provide further clarifying activities.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 76–77, 84–85, and 92–93 for POWER UP: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 20: Rigid Motion on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 62–63; 30 min.</li> <li>EL Adaptations Lesson 20</li> </ul> <p><b>Example C</b>  Make the generalization required and review this with another example.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 94–97 for READY TO GO: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 19: Understanding Congruence of Two-Dimensional Figures (Using Rigid Motions)</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 60–61; 30 min.</li> <li>EL Adaptations Lesson 19</li> </ul> <p><b>Connect</b>  Here we see two different ways to show that two figures are <i>congruent</i>. Again as with Understand, see the sections (3) <i>Introduce and Model</i> referenced below.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 76–77, 84–85, and 92–93 for POWER UP: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 20: Rigid Motion on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 62–63; 30 min.</li> <li>EL Adaptations Lesson 20</li> </ul> <p><b>Problem Solving</b>  Remind students of the 4-step process for problem solving. Read the problem to students and clarify what is on the diagram.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 94–97 for READY TO GO: Problem Solving. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 19: Understanding Congruence of Two-Dimensional Figures (Using Rigid Motions)</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 60–61; 20 min.</li> <li>EL Adaptations Lesson 19</li> </ul> <p><b>Practice</b>  Read each Question to students if necessary, and make sure all directions are clear. For additional practice see references below taken from three Lessons of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 76–77, 84–85, and 92–93 for POWER UP: Model Application. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 20: Rigid Motion on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 62–63; 30 min.</li> <li>EL Adaptations Lesson 20</li> </ul> <p><b>Practice</b>  See pp. 74, 82, and 90 of <i>Common Core Support Coach Teacher's Manual</i> for useful EL advice.  Practice – move through this Practice in sections, the first 2 Questions, then 2 more, each time checking student work.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 94–97 for READY TO GO: Support Independent Practice. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 20: Rigid Motion on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 62–63; 20 min.</li> <li>EL Adaptations Lesson 20</li> </ul> <p><b>Example A</b>  See Before the Lesson. Use the example here to prepare students for predictable changes in coordinates from pre-image to image when applying a rigid motion on the coordinate plane.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 78–81 for READY TO GO: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 21: Dilation on the Coordinate Plane</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 64–65; 20 min.</li> <li>EL Adaptations Lesson 21</li> </ul> <p><b>Before the Lesson</b>  Introduce <i>scale factor</i> as in blueprints, maps, and photographs. Speak of enlarging a photo, reducing a photo, or zooming in and out of a screen view. Dilation does not change the shape of the figure involved.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 98–99 for PLUG IN: Support Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

**Week 21**

**Week 22**

**Day 1**

**Lesson Focus**

**Common Core Coach Lesson 21: Dilation on the Coordinate Plane**

- *Teacher's Manual* pp. 64–65; 20 min.
- *EL Adaptations Lesson 21*

**Understand**

The dilation here is an enlargement. Explain how the rectangle became enlarged by a factor of 3. Go over each step of the process.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 98–99 for *PLUG IN: Support Introduce and Model*; 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 22: Understanding Similarity of Two-Dimensional Figures (Using Transformations)**

- *Teacher's Manual* pp. 66–67; 30 min.
- *EL Adaptations Lesson 22*

**Connect**

This Connect is a good way to compare two rectangles that may look similar and to test if they are. Make sure all steps are clear.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 108–109 for *POWER UP: Model Applications (A, B)*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 2**

**Lesson Focus**

**Common Core Coach Lesson 21: Dilation on the Coordinate Plane**

- *Teacher's Manual* pp. 64–65; 20 min.
- *EL Adaptations Lesson 21*

**Connect**

In Connect, point out that this *dilation* is a reduction (scale factor  $\frac{1}{2}$ ) shown on a coordinate plane. Make it clear that the ordered pairs all change by the same factor.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 100–101 for *POWER UP: Model Application (A, B)*; 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 22: Understanding Similarity of Two-Dimensional Figures (Using Transformations)**

- *Teacher's Manual* pp. 66–67; 30 min.
- *EL Adaptations Lesson 22*

**Practice**

See p. 110 of *Common Core Support Coach Teacher's Manual* for a useful suggestion for EL. Read directions to students observe their work to insure they are moving along correctly.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 108–109 for *POWER UP: Practice and Assess*. For extra challenges: Questions 8 and 9 of *Common Core Coach*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 3**

**Lesson Focus**

**Common Core Coach Lesson 21: Dilation on the Coordinate Plane**

- *Teacher's Manual* pp. 64–65; 30 min.
- *EL Adaptations Lesson 21*

**Practice**

Read all directions to students if necessary, and make sure all questions are clear. See p. 100 of *Common Core Support Coach Teacher's Manual* for a useful suggestion for EL.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 102–105 for *READY TO GO: Support Independent Practice (3–9)*. Extra challenge: Questions 9 and 10 of *Common Core Coach*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 23: Extending Understanding of Angle Relationships**

- *Teacher's Manual* pp. 68–69; 20 min.
- *EL Adaptations Lesson 23*

**Before the Lesson**

Many new ideas and words are here to introduce and demonstrate, so go over the list on p. 68 of the *Teacher's Manual*. Students need to hear each of these words spoken and clarified.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 116–117 for *POWER UP: Build Background*; 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 4**

**Lesson Focus**

**Common Core Coach Lesson 22: Understanding Similarity of Two-Dimensional Figures (Using Transformations)**

- *Teacher's Manual* pp. 66–67; 30 min.
- *EL Adaptations Lesson 22*

**Before the Lesson**

Distinguish between congruent and similar figures. Use models. Broaden the discussion to three-dimensional figures. See Before the Lesson.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 108–109 for *POWER UP: Build Background*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 23: Extending Understanding of Angle Relationships**

- *Teacher's Manual* pp. 68–69; 30 min.
- *EL Adaptations Lesson 23*

**Understand**

Carefully guide students through every step and every move of this page, making sure they understand the concepts, words, and symbols. You may need to coach students paragraph by paragraph.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 116–117 for *POWER UP: Introduce and Model*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 5**

**Lesson Focus**

**Common Core Coach Lesson 22: Understanding Similarity of Two-Dimensional Figures (Using Transformations)**

- *Teacher's Manual* pp. 66–67; 30 min.
- *EL Adaptations Lesson 22*

**Understand**

Review all the rigid motions studied and make sure students understand the motions involved. See p. 108 of *Common Core Support Coach Teacher's Manual* for a useful suggestion for EL.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 108–109 for *POWER UP: Introduce and Model*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 23: Extending Understanding of Angle Relationships**

- *Teacher's Manual* pp. 68–69; 30 min.
- *EL Adaptations Lesson 23*

**Connect**

To students: Watch out for parallel and angle measure symbols. Make sure that angle identification with numbers is clear to students.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 116–117 for *POWER UP: Model Application (A)*; 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

	Week 23	Week 24
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 23: Extending Understanding of Angle Relationships</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 68–69; 30 min.</li> <li>EL Adaptations Lesson 23</li> </ul> <p><b>Practice</b>  See p. 114 of <i>Common Core Support Coach Teacher's Manual</i> for a useful suggestion for EL. Read directions to students and observe their work to insure they are moving along correctly.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 116–117 for <b>POWER UP: Practice and Assess</b>. For extra challenges: Questions 9 and 10 of <i>Common Core Coach</i>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 25: Explaining the Pythagorean Theorem</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 72–73; 20 min.</li> <li>EL Adaptations Lesson 25</li> </ul> <p><b>Understand</b>  Concentrate on right triangles, acquainting students with all parts. Make sure students can identify all parts easily. This page introduces the Pythagorean Theorem written in its famous form, and its converse. Explain all steps on this page.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 122–123 for <b>PLUG IN: Build Background</b>. 20 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 24: Angles in Triangles</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 70–71; 30 min.</li> <li>EL Adaptations Lesson 24</li> </ul> <p><b>Before the Lesson</b>  Go over vocabulary dealing with angles and triangles, from <i>acute</i>, <i>obtuse</i>, <i>straight</i>, and <i>right</i> to <i>vertex</i> and <i>opposite</i>. Make sure students have mastered the full meaning of each word.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 118–121 for <b>READY TO GO: Build Background</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 25: Explaining the Pythagorean Theorem</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 72–73; 30 min.</li> <li>EL Adaptations Lesson 25</li> </ul> <p><b>Connect</b>  This page is an application of the Theorem. Offer additional opportunities for students to use the formula.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 122–123 for <b>PLUG IN: Introduce Concepts and Vocabulary</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 24: Angles in Triangles</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 70–71; 30 min.</li> <li>EL Adaptations Lesson 24</li> </ul> <p><b>Understand</b>  Note the new ideas and words, and “old” words such as <i>alternate interior</i>, <i>parallel</i>, and <i>transversal</i>. See note for EL on p. 122 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 118–121 for <b>READY TO GO: Introduce and Model</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 25: Explaining the Pythagorean Theorem</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 72–73; 30 min.</li> <li>EL Adaptations Lesson 25</li> </ul> <p><b>Example A</b>  Example A shows an application of the Theorem. See note for EL on p. 122 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 122–123 for <b>PLUG IN: Support Discussion</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 24: Angles in Triangles</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 70–71; 30 min.</li> <li>EL Adaptations Lesson 24</li> </ul> <p><b>Connect</b>  See note for EL on p. 114 of <i>Common Core Support Coach Teacher's Manual</i>. Students need to be able to figure out problems such as those posed on this page. Offer additional practice. (See reference below.)</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 118–121 for <b>READY TO GO: Work Together (A, B)</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 25: Explaining the Pythagorean Theorem</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 72–73; 30 min.</li> <li>EL Adaptations Lesson 25</li> </ul> <p><b>Example B</b>  Example B is a problem dealing with the <i>converse</i> of the Theorem. Explain <i>converse</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 122–123 for <b>PLUG IN: Model Application (A)</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 24: Angles in Triangles</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 70–71; 30 min.</li> <li>EL Adaptations Lesson 24</li> </ul> <p><b>Practice</b>  Explain each section and go over each section before moving on to the next section.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 118–121 for <b>READY TO GO: Support Independent Practice (1–8)</b>. For extra challenges: Questions 16 and 17 of <i>Common Core Coach</i>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 25: Explaining the Pythagorean Theorem</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 72–73; 30 min.</li> <li>EL Adaptations Lesson 25</li> </ul> <p><b>Practice</b>  Review vocabulary and make sure students can define each one. Ask students to explain each word with the help of geometric models. Read and explain Questions to make sure they are clearly understood.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 122–123 for <b>PLUG IN: Practice and Assess</b>. 10 min.</li> <li>Readiness for <i>Common Core</i> <a href="#">below level</a> <a href="#">above level</a></li> </ul>

**Week 25**

**Week 26**

**Day 1**

**Lesson Focus**

**Common Core Coach Lesson 26: Applying the Pythagorean Theorem in Two and Three Dimensions**

- *Teacher's Manual* pp. 74–75; 20 min.
- *EL Adaptations Lesson 26*

**Before the Lesson**

Review the Pythagorean Theorem along with all concepts and vocabulary associated with the theorem.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 124–125 for **POWER UP: Build Background**. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 27: Applying the Pythagorean Theorem on the Coordinate Plane**

- *Teacher's Manual* pp. 76–77; 30 min.
- *EL Adaptations Lesson 27*

**Example A**

This page is an application of the Theorem – computing the distance between any two points on a grid. Offer additional opportunities to use the formula. See Math Tools of *Common Core Coach* for Coordinate Plane.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 126–129 for **READY TO GO: Introduce and Model**. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 2**

**Lesson Focus**

**Common Core Coach Lesson 26: Applying the Pythagorean Theorem in Two and Three Dimensions**

- *Teacher's Manual* pp. 74–75; 30 min.
- *EL Adaptations Lesson 26*

**Example A**

This page is an application of the theorem. Offer additional opportunities to use the formula.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 124–125 for **POWER UP: Model Application (A)**. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 27: Applying the Pythagorean Theorem on the Coordinate Plane**

- *Teacher's Manual* pp. 76–77; 30 min.
- *EL Adaptations Lesson 27*

**Example B**

This page is another application of the Theorem. Offer additional opportunities to use the formula.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 126–129 for **READY TO GO: Work Together (A)**. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 3**

**Lesson Focus**

**Common Core Coach Lesson 26: Applying the Pythagorean Theorem in Two and Three Dimensions**

- *Teacher's Manual* pp. 74–75; 30 min.
- *EL Adaptations Lesson 26*

**Example B**

This page is another application of the theorem. Offer additional real world opportunities to use the formula.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 124–125 for **POWER UP: Model Application (B)**. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 27: Applying the Pythagorean Theorem on the Coordinate Plane**

- *Teacher's Manual* pp. 76–77; 30 min.
- *EL Adaptations Lesson 27*

**Practice**

Read the Questions if they are not clear.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 126–129 for **READY TO GO: Support Independent Practice (1–8)**. Extra challenge: Questions 11 and 12 on p. 149 of *Common Core Coach*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 4**

**Lesson Focus**

**Common Core Coach Lesson 26: Applying the Pythagorean Theorem in Two and Three Dimensions**

- *Teacher's Manual* pp. 74–75; 30 min.
- *EL Adaptations Lesson 26*

**Practice**

Review vocabulary and make sure students can define each word. Ask students to explain each word with the help of geometric figures. Read and explain Questions to make sure they are clearly understood.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 124–125 for **POWER UP: Practice and Assess**. Extra challenge: Questions 8 and 9 on p. 145 of *Common Core Coach*. 10 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 28: Problem Solving: Volume**

- *Teacher's Manual* pp. 78–79; 20 min.
- *EL Adaptations Lesson 28*

**Soup Can**

Make sure students know the common three-dimensional figures. Reminder: volume is measured in cubic units, such as cubic inches, cubic centimeters, etc. Recall what  $\pi$  means and how it appears in the formulas.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 132–133 for **POWER UP: Model Application (A)**. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Day 5**

**Lesson Focus**

**Common Core Coach Lesson 27: Applying the Pythagorean Theorem on the Coordinate Plane**

- *Teacher's Manual* pp. 76–77; 20 min.
- *EL Adaptations Lesson 27*

**Before the Lesson**

Review the Pythagorean Theorem along with all concepts and vocabulary associated with the theorem. Review finding the length of a horizontal or vertical segment on the coordinate plane.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 126–129 for **READY TO GO: Build Background**. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

**Lesson Focus**

**Common Core Coach Lesson 28: Problem Solving: Volume**

- *Teacher's Manual* pp. 78–79; 30 min.
- *EL Adaptations Lesson 28*

**Carnival Treats**

See Math Tools of *Common Core Coach* for Volume Formulas.

**Differentiation Options**

- *Common Core Support Coach Teacher's Manual* pp. 132–133 for **POWER UP: Model Application (B)**. 20 min.
- *Readiness for Common Core* [below level](#) [above level](#)

	Week 27	Week 28
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 28: Problem Solving: Volume</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 78–79; 20 min.</li> <li>EL Adaptations Lesson 28</li> </ul> <p><b>Beach Ball</b>  See note for EL on p. 132 of <i>Common Core Support Coach Teacher's Manual</i>.  See Math Tools of <i>Common Core Coach</i> for Volume Formulas.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 132–133 for POWER UP: Model Application (C). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 4 Assessment</b></p> <ul style="list-style-type: none"> <li>Assessments pp. 34–39; 40 min.</li> <li>Assessments Answer Keys p. 12</li> </ul> <p><b>Questions 1–20</b>  Provide extra time for assessments and provide readers to read word problems to students.</p> <p><b>Differentiation Options</b>  Provide extra time and assistance for students who qualify.</p>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 28: Problem Solving: Volume</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 78–79; 20 min.</li> <li>EL Adaptations Lesson 28</li> </ul> <p><b>Tennis Balls in a Can</b>  See Math Tools of <i>Common Core Coach</i> for Volume Formulas.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 132–133 for POWER UP: Model Application (A, C). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 4 Assessment</b></p> <ul style="list-style-type: none"> <li>Assessments pp. 40–43; 40 min.</li> <li>Assessments Answer Keys pp. 12–14</li> </ul> <p><b>Questions 21–25</b>  Provide clear explanation of questions.</p> <p><b>Differentiation Options</b>  Provide extra time and assistance for students who qualify.</p>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 28: Problem Solving: Volume</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 78–79; 20 min.</li> <li>EL Adaptations Lesson 28</li> </ul> <p><b>Practice</b>  See Math Tools of <i>Common Core Coach</i> for Volume Formulas.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 132–133 for POWER UP: Practice and Assess. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Domain 5: Statistics and Probability</b></p> <p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 29: Constructing and Interpreting Scatter Plots</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 82–83; 20 min.</li> <li>EL Adaptations Lesson 29</li> </ul> <p><b>Before the Lesson</b>  See Before the Lesson. Review plotting graphs given a set of ordered pairs. Explain bivariate and outlier with examples.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 140–141 for POWER UP: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 4 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 156–157; 40 min.</li> <li>Teacher's Manual pp. 111–112</li> </ul> <p><b>Questions 1–10</b>  Go over the questions and discuss.  Ask students to take a look at instructions on these pages, the first half of the Review. Make sure all instructions are clear.  See Progression Chart on pp. 56–57 (<i>Teacher's Manual</i>) for a view of progressions connecting the Lessons of Domain 4.</p> <p><b>Differentiation Options</b>  Ask students to do a single page at a time, and then go over the questions.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 29: Constructing and Interpreting Scatter Plots</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 82–83; 30 min.</li> <li>EL Adaptations Lesson 29</li> </ul> <p><b>Understand</b>  Explain the idea of connecting two sets of data to determine of an association exists. Give simple examples such as age and height for school people. See p. 140 of <i>Common Core Support Coach Teacher's Manual</i> for a useful tip for EL</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 140–141 for POWER UP: Introduce and Model. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Review and Assess</b>  <b>Common Core Coach Domain 4 Review</b></p> <ul style="list-style-type: none"> <li>Student Edition pp. 158–159; 40 min.</li> <li>Teacher's Manual pp. 112–112</li> </ul> <p><b>Questions 11–14 &amp; Performance Task</b>  Go over the questions and discuss. Pay special attention to the Performance Task on p. 159.  Ask students to take a look at instructions on these pages, the second half of the Review. In particular, clarify any doubts with respect to Performance Task (<i>Proving the Pythagorean Theorem</i>) on p. 159.  See Progression Chart on pp. 56–57 (<i>Teacher's Manual</i>) for a view of progressions connecting the Lessons of Domain 4.</p> <p><b>Differentiation Options</b>  Ask students to do a single page at a time, and then go over the questions.</p>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 29: Constructing and Interpreting Scatter Plots</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 82–83; 30 min.</li> <li>EL Adaptations Lesson 29</li> </ul> <p><b>Connect</b>  Slopes of straight lines can be positive and negative. Explain the meaning of a positive slope and a negative slope when creating scatter plots.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li><i>Common Core Support Coach Teacher's Manual</i> pp. 140–141 for POWER UP: Model Application (A). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

	Week 29	Week 30
Day 1	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 29: Constructing and Interpreting Scatter Plots</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 82–83; 20 min.</li> <li>EL Adaptations Lesson 29</li> </ul> <p><b>Practice</b>            Help with each section of Practice, making sure instructions are clear. Explain each graph of Practice to make sure students know how to answer the questions.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 140–141 for POWER UP: Practice and Assess. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 30: Modeling Relationships in Scatter with Straight Lines</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 84–85; 30 min.</li> <li>EL Adaptations Lesson 30</li> </ul> <p><b>Practice</b>            Explain directions for all Questions. Spend extra time going over Questions 8 and 9. See note on EL on p. 142 of <i>Common Core Support Coach Teacher's Manual</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 142–145 for READY TO GO: Problem Solving. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 2	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 30: Modeling Relationships in Scatter with Straight Lines</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 84–85; 20 min.</li> <li>EL Adaptations Lesson 30</li> </ul> <p><b>Before the Lesson</b>            Go over the concepts in the Before the Lesson. Explain a linear association, and both a positive and negative linear association. Display examples of both.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 142–145 for READY TO GO: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 31: Using Linear Models to Interpret Data</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 86–87; 20 min.</li> <li>EL Adaptations Lesson 31</li> </ul> <p><b>Before the Lesson</b>            See Before the Lesson. "Linear Models" means straight lines and the <i>slope-intercept</i> form of a straight line. Go over the meaning of <math>y = mx + b</math>, making sure students can go both ways: graph of line on a grid to equation and from equation to graphing line. (We suggest old-fashioned grid paper.) They should have a full understanding of <i>intercept</i> and <i>slope</i> using this equation.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 148–149 for POWER UP: Build Background. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 3	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 30: Modeling Relationships in Scatter with Straight Lines</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 84–85; 20 min.</li> <li>EL Adaptations Lesson 30</li> </ul> <p><b>Understand</b>            Understand-Connect: These pages illustrate two examples of <i>scatter plot</i>. On the Understand page find a positive association (correlation) between number of sponsors and money raised. Explain <i>trend line</i> and <i>outlier</i>. Offer additional examples.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 142–145 for READY TO GO: Introduce Concepts and Vocabulary. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 31: Using Linear Models to Interpret Data</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 86–87; 20 min.</li> <li>EL Adaptations Lesson 31</li> </ul> <p><b>Example A</b>            With knowledge of the <i>slope-intercept</i> form, students can take the graph of a line and write the equation. This also means inspecting a <i>trend line</i> to determine its equation, and from the equation, we have its <i>initial value</i> and its <i>slope</i>. Show every step of this Example and add a few more <i>scatter plots</i> for analysis.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 148–149 for POWER UP: Support Discussion. 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 4	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 30: Modeling Relationships in Scatter with Straight Lines</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 84–85; 30 min.</li> <li>EL Adaptations Lesson 30</li> </ul> <p><b>Connect</b>            On the Connect page, find a negative association between pages in novels and times checked out of a library. Notice that the trend line here shows a negative slope, meaning a negative association between the two variables in contrast to graph in Understand. Explore and contrast the two situations.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 142–145 for READY TO GO: Support Discussion. 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 31: Using Linear Models to Interpret Data</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 86–87; 20 min.</li> <li>EL Adaptations Lesson 31</li> </ul> <p><b>Example B</b>            The <i>trend line</i> in Example shows a downward movement, from left to right. This suggests that the slope will be negative. Check out the data to show students that as prices came down the number of orders went up. Carefully highlight each step—the calculation of <math>m</math> and <math>b</math>. These are the slope and <math>y</math>-<i>intercept</i>.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 148–149 for POWER UP: Model Application (A). 20 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>
Day 5	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 30: Modeling Relationships in Scatter with Straight Lines</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 84–85; 30 min.</li> <li>EL Adaptations Lesson 30</li> </ul> <p><b>Understand-Connect</b>            On this third day of Understand-Connect, direct students to find two contrasting associations, one positive and one negative. Ask them to come up with data for both. Also, ask students to find bivariate data that has almost <u>no</u> association.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 142–145 for READY TO GO: Support Independent Practice (1–4). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>	<p><b>Lesson Focus</b>  <b>Common Core Coach Lesson 31: Using Linear Models to Interpret Data</b></p> <ul style="list-style-type: none"> <li>Teacher's Manual pp. 86–87; 30 min.</li> <li>EL Adaptations Lesson 31</li> </ul> <p><b>Practice</b>            Prepare students for a variety of different Questions in this Practice, all dealing with scatter diagrams and the straight line equation <math>y = mx + b</math>, which gives us <i>slope</i> and <i>intercept</i>, and from these we have information about the <i>trend</i>. Pay special attention to Questions 6 and 7.</p> <p><b>Differentiation Options</b></p> <ul style="list-style-type: none"> <li>Common Core Support Coach Teacher's Manual pp. 148–149 for POWER UP: Practice and Assess (1–4). 10 min.</li> <li>Readiness for Common Core <a href="#">below level</a> <a href="#">above level</a></li> </ul>

## Week 31

## Week 32

Day 1

### Lesson Focus

#### **Common Core Coach Lesson 32: Investigating Patterns of Association in Categorical Data**

- *Teacher's Manual pp. 88–89; 30 min.*
- *EL Adaptations Lesson 32*

#### Before the Lesson

See the Before the Lesson. To prepare students for categorizing data, start a discussion about where students see data in categories – sports teams, most popular movies, population tables, etc. Make up several tables with local data, and ask about *frequency* and *relative frequency* of specific categories.

#### Differentiation Options

- *Make a Frequency Chart Break class into groups, and ask each group to collect data on a single topic and make a frequency chart. Compare charts. 20 min.*
- *Readiness for Common Core* [below level](#) [above level](#)

### Review and Assess

#### **Common Core Coach Domain 5 Review**

- *Student Edition pp. 178–179; 40 min.*
- *Teacher's Manual p. 115*

#### Questions 1–6

Go over the questions and discuss. Ask students to take a look at instructions on these pages, the first half of the Review. Make sure all instructions are clear. See Progression Chart on pp. 80–81 (*Teacher's Manual*) for a view of progressions connecting the Lessons of Domain 5.

#### Differentiation Options

Ask students to do a single page at a time, and then go over the questions.

Day 2

### Lesson Focus

#### **Common Core Coach Lesson 32: Investigating Patterns of Association in Categorical Data**

- *Teacher's Manual pp. 88–89; 20 min.*
- *EL Adaptations Lesson 32*

#### Understand

The Understand page shows a two-way *frequency table*. Make each part of this exercise clear, the collection of data, the calculation of percents, and what *relative frequency* means.

#### Differentiation Options

- *Make a Frequency Table Break class into groups, and ask each group to collect data and then produce a two-way frequency table. Ask for all computations as shown on Understand page. Compare charts. 20 min.*
- *Readiness for Common Core* [below level](#) [above level](#)

### Review and Assess

#### **Common Core Coach Domain 5 Review**

- *Student Edition pp. 179–181; 40 min.*
- *Teacher's Manual p. 115*

#### Questions 7–10 & Performance Task

Ask students to take a look at instructions on these pages, the second half of the Review. In particular, clarify any doubts with respect to Performance Task (*Exploring Variables*) on p. 181. See Progression Chart on pp. 80–81; (*Teacher's Manual*) for a view of progressions connecting the Lessons of Domain 5.

#### Differentiation Options

Ask students to do a single page at a time, and then go over the questions.

Day 3

### Lesson Focus

#### **Common Core Coach Lesson 32: Investigating Patterns of Association in Categorical Data**

- *Teacher's Manual pp. 88–89; 20 min.*
- *EL Adaptations Lesson 32*

#### Connect

Point out that a two-way *frequency table* is another way to show associations between two categories. In the Understand page, we saw an association between boy and girls and their agreement on a school issue. In Connect, explain the association between curfews and bedtimes. Compare *scatter plots* and *two-way tables* as ways of showing associations, and the virtues/deficits of each.

#### Differentiation Options

- *Discuss Association Use the two-way tables from the previous day to discuss any associations. Break class into groups, and discuss the degree of association on their two-way tables. 20 min.*
- *Readiness for Common Core* [below level](#) [above level](#)

### Review and Assess

#### **Common Core Coach Domain 5 Assessment**

- *Assessments pp. 44–52; 40 min.*
- *Assessments Answer Keys p. 15*

#### Questions 1–15

Provide extra time for assessments and provide readers to read word problems to students.

#### Differentiation Options

Provide extra time and assistance for students who qualify.

Day 4

### Lesson Focus

#### **Common Core Coach Lesson 32: Investigating Patterns of Association in Categorical Data**

- *Teacher's Manual pp. 88–89; 30 min.*
- *EL Adaptations Lesson 32*

#### Practice

Read the directions to students as needed. Prepare students for each section (there are 4 altogether) of this Practice. Ask students to do Questions 1–11 (3 sections), as Questions 12 and 13 will be assigned the next day. Go over the results of Questions 1 to 11 and discuss.

#### Differentiation Options

- *Discuss the Practice Break class into groups to discuss results of Questions 1–11. Questions 12 and 13 for the next day. 10 min.*
- *Readiness for Common Core* [below level](#) [above level](#)

### Review and Assess

#### **Common Core Coach Domain 5 Assessment**

- *Assessments pp. 53–57; 40 min.*
- *Assessments Answer Keys pp. 15–17*

#### Questions 16–20

Provide clear explanation of questions.

#### Differentiation Options

Provide extra time and assistance for students who qualify.

Day 5

### Lesson Focus

#### **Common Core Coach Lesson 32: Investigating Patterns of Association in Categorical Data**

- *Teacher's Manual pp. 88–89; 30 min.*
- *EL Adaptations Lesson 32*

#### Practice

Give students time to do Questions 12 and 13. Assist them in making the correct computations. Go over Questions 12 and 13, and discuss results.

#### Differentiation Options

- *Discuss the Practice Break class into groups to discuss results of Questions 12 and 13. 10 min.*
- *Readiness for Common Core* [below level](#) [above level](#)

### End of Year Review

#### **Common Core Coach Review Domains 1–3 Lessons 1–17**

#### **Common Core Support Coach Practice Tests 1 & 2**

- *Assessments pp. 64–101*
- *Assessments Answer Key pp. 26–38*

Select key questions from Practice Tests 1 and 2 to review with students depending on their needs.

#### Differentiation Options

- *Common Core Support Coach Assessments pp. 44–55 for Performance Tasks A & B in Domains 1–3*



## Week 33

Day 1

### End of Year Review

**Common Core Coach Review Domains 4 and 5**  
Lessons 18–32

### Common Core Support Coach Practice Tests 1 & 2

- Assessments pp. 64–101
- Assessments Answer Key pp. 26–38

Select key questions from Practice Tests 1 and 2 to review with students depending on their needs.

### Differentiation Options

*Common Core Support Coach Assessments* pp. 56–61 for Performance Tasks A & B in Domains 4 and 5

Day 2

### Summative Assessment

#### Common Core Coach Summative Assessment

- Assessments pp. 58–67; 40 min.
- Assessments Answer Key p. 18

### Questions 1–25

Provide extra time for assessments and provide readers to read word problems to students.

### Differentiation Options

Provide extra time and assistance for students who qualify.

Day 3

### Summative Assessment

#### Common Core Coach Summative Assessment

- Assessments pp. 67–76; 40 min.
- Assessments Answer Key pp. 18–19

### Questions 26–50

Provide extra time for assessments and provide readers to read word problems to students.

### Differentiation Options

Provide extra time and assistance for students who qualify.

Day 4

Day 5