

McDougal Littell Algebra 2 Correlation to the Louisiana Comprehensive Curriculum

| <b>Unit</b>   | <b>Topics</b>  | <b>McDougal Littell lessons, resources, &amp; activities</b>                               |
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| <b>UNIT 1: Functions</b>                                | Review Number Lines and Linear Equations Review        | Chapter 1, Lessons 1.1-1.5<br>Chapter 2, Lessons 2.1-2.8                                   |
|   | Linear Inequalities Review                             | Chapter 1, Lesson 1.6  |
|   | Absolute Value Equations and Inequalities-Solving      | Chapter 1, Lesson 1.7  |
|   | Functions Review                                       | Chapter 2, Lesson 2.1  |
|   | Linear Equations                                       | Chapter 2, Lessons 2.2-2.5,<br>Concept Activity 2.5, p. 107                                |
|   | Linear Inequalities-Two Variables                      | Chapter 2, Lesson 2.6  |
|   | Piecewise Functions                                    | Chapter 2, Lesson 2.7,<br>Technology Activity 2.7,<br>p. 121                               |
|   | Absolute Value Functions                               | Chapter 2, Lesson 2.8  |
|   | <b>UNIT 2: Polynomial Equations &amp; Inequalities</b> | Exponents Review   |
| Polynomial Functions                                    |  | Chapter 6, Lesson 6.2-6.4,<br>Concept Activity 6.2, p. 337                                 |
| Remainder and Factor Theorems-Polynomial Division       |  | Chapter 6, Lesson 6.5  |
| Solving Polynomial Functions and Analyzing Their Graphs |  | Chapter 6, Lessons 6.6-6.8,<br>Technology Activity 6.7,<br>p. 372                          |
| Modeling With Polynomial Functions                      |  | Chapter 6, Lesson 6.9,<br>Concept Activity 6.9, p. 379                                     |
| <b>UNIT 3: Rational Equations &amp; Inequalities</b>    |  | Graphing Rational Functions  |
|   | Operations With Rational Expressions                   | Chapter 9, Lessons 9.4-9.5,<br>Technology Activity 9.4,<br>p. 560                          |
|   | Solving Rational Equations                             | Chapter 9, Lesson 9.6  |
| <b>UNIT 4: Radicals &amp; the Complex Number System</b> | Nth Roots and Rational Exponents                       | Chapter 7, Lessons 7.1-7.2   |
|   | Operations on Functions                                | Chapter 7, Lesson 7.3  |
|   | Inverse Functions                                      | Chapter 7, Lesson 7.4,<br>Concept Activity 7.4, p. 421,<br>Technology Activity 7.4, p. 430 |
|   | Graphing Square and Cube Root Functions                | Chapter 7, Lesson 7.5  |
|   | Solving Radical Equations                              | Chapter 7, Lesson 7.6  |

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| <b>UNIT 5: Quadratic &amp; Higher Order Polynomial Functions</b> | Quadratic Functions                                | Chapter 5, Lessons 5.1-5.3, Technology Activity 5.3, p. 271  |
|  | Complex Numbers                                    | Chapter 5, Lesson 5.4  |
|  | Completing the Square                              | Chapter 5, Lesson 5.5, Concept Activity 5.5, p. 281  |
|  | Solving & Quadratic Functions                      | Chapter 5, Lessons 5.6-5.7   |
|  | Modeling With Quadratic Functions                  | Chapter 5, Lesson 5.8  |
| <b>UNIT 6: Exponential &amp; Logarithmic Functions</b>           | Exponential Functions: Growth and Decay            | Chapter 8, Lessons 8.1-8.2, Concept Activity 8.2, p. 473   |
|  | The Number e                                       | Chapter 8, Lesson 8.3  |
|  | Logarithmic Functions and Properties of Logarithms | Chapter 8, Lessons 8.4-8.5, Technology Activity 8.5, p. 500  |
|  | Solving Exponential and Logarithmic Functions      | Chapter 8, Lesson 8.6  |
|  | Modeling With Exponential and Power Functions      | Chapter 8, Lesson 8.7  |
|  | Logistic Growth Functions                          | Chapter 8, Lesson 8.8  |
| <b>UNIT 7: Further Investigations of Functions</b>               |  | See the Comprehensive Guide-Use any chapters to tie together information on the Functions studied throughout the year. |
| <b>UNIT 8: Conic Sections</b>                                    | Distance and Midpoint Formulas                     | Chapter 10, Lessons 10.1   |
|  | Parabolas  | Chapter 10, Lesson 10.2  |
|  | Circles  | Chapter 10, Lesson 10.3  |
|  | Ellipses   | Chapter 10, Lesson 10.4  |
|  | Hyperbolas   | Chapter 10, Lesson 10.5  |
|  | Exploring, graphing, and Classifying Conics        | Chapter 10, Lesson 10.6, Concept Activity 10.6, p.622  |
|  | Solving Quadratic Systems                          | Chapter 10, Lesson 10.7  |
|  | Eccentricity                                       | Chapter 10 Extension, p.639  |