

**Glencoe/McGraw-Hill**

**Glencoe Algebra 2 ©2003  
Mathematics, K-12; C 9-12;  
12. Algebra 2  
ISBN# 0-07-827999-2**

**correlated to**

**North Carolina  
Mathematics Standard Course of Study  
Algebra 2**

**GLENCOE/MCGRAW-HILL  
GLENCOE ALGEBRA 2 ©2003**

**CORRELATED TO  
NORTH CAROLINA  
MATHEMATICS STANDARD COURSE OF STUDY  
ALGEBRA 2**

<b>OBJECTIVES</b>	<b>PAGE REFERENCES</b>
<b>COMPETENCY GOAL 1: The learner will perform operations with complex numbers, matrices, and polynomials to solve problems.</b>	
1.01 Simplify and perform operations with rational exponents and logarithms (common and natural) to solve problems.	SE: 257–262, 531–533, 536, 541–545, 547, 554–557, 568–570, 838 TWE: 257–262, 531–533, 536, 541–545, 547, 554–557, 568–570, 838
1.02 Define and compute with complex numbers.	SE: 270–274, 280 TWE: 270–274, 280
1.03 Operate with algebraic expressions (polynomial, rational, complex fractions) to solve problems.	SE: 229–231, 233–236, 472–477, 479–484, 837, 847 TWE: 229–231, 233–236, 472–477, 479–484, 837, 847
1.04 Operate with matrices to model and solve problems.	SE: 154–157, 160–165, 167–174, 195–208, 209–214, 215, 834–836, 865 TWE: 154–157, 160–165, 167–174, 195–208, 209–214, 215, 834–836, 865
1.05 Model and solve problems using direct, inverse, combined and joint variation.	SE: 492–497, 848 TWE: 492–497, 848
<b>COMPETENCY GOAL 2: The learner will use relations and functions to solve problems.</b>	
2.01 Use the composition and inverse of functions to model and solve problems; justify results.	SE: 384–388, 391–394, 403–404, 844 TWE: 384–388, 391–394, 403–404, 844

**GLENCOE/MCGRAW-HILL  
GLENCOE ALGEBRA 2 ©2003**

**CORRELATED TO  
NORTH CAROLINA  
MATHEMATICS STANDARD COURSE OF STUDY  
ALGEBRA 2**

<b>OBJECTIVES</b>	<b>PAGE REFERENCES</b>
2.02 Use quadratic functions and inequalities to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>• Solve using tables, graphs, and algebraic properties.</li> </ul>	SE: 286–292, 294–298, 301–304, 322–327, 329–334, 340, 455–459, 839–841, 867  TWE: 286–292, 294–298, 301–304, 322–327, 329–334, 340, 455–459, 839–841, 867
<ul style="list-style-type: none"> <li>• Interpret the constants and coefficients in the context of the problem.</li> </ul>	SE: 286–287  TWE: 286–287
2.03 Use exponential functions to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>• Solve using tables, graphs, and algebraic properties.</li> </ul>	SE: 523–529, 554–558, 560–564, 566–567, 570, 849–850  TWE: 523–529, 554–558, 560–564, 566–567, 570, 849–850
<ul style="list-style-type: none"> <li>• Interpret the constants, coefficients, and bases in the context of the problem.</li> </ul>	SE: 524, 554, 560, 566, 570, 850  TWE: 524, 554, 560, 566, 570, 850

**GLENCOE/MCGRAW-HILL  
GLENCOE ALGEBRA 2 ©2003**

**CORRELATED TO  
NORTH CAROLINA  
MATHEMATICS STANDARD COURSE OF STUDY  
ALGEBRA 2**

<b>OBJECTIVES</b>	<b>PAGE REFERENCES</b>
2.04 Create and use best-fit mathematical models of linear, exponential, and quadratic functions to solve problems involving sets of data.	
<ul style="list-style-type: none"> <li>Interpret the constants, coefficients, and bases in the context of the problem.</li> </ul>	<p>The opportunity to address this objective is available. See the following:</p> <p>SE: 359, 664–665, 671–674, 676–680, 681, 682–685</p> <p>TWE: 359, 664–665, 671–674, 676–680, 681, 682–685</p>
<ul style="list-style-type: none"> <li>Check the model for goodness-of-fit and use the model, where appropriate, to draw conclusions or make predictions.</li> </ul>	<p>The opportunity to address this objective is available. See the following:</p> <p>SE: 87, 359, 664–665, 671–674, 676–680, 681, 682–685</p> <p>TWE: 87, 359, 664–665, 671–674, 676–680, 681, 682–685</p>
2.05 Use rational equations to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>Solve using tables, graphs, and algebraic properties.</li> </ul>	<p>SE: 505–510, 512, 516, 849</p> <p>TWE: 505–510, 512, 516, 849</p>
<ul style="list-style-type: none"> <li>Interpret the constants and coefficients in the context of the problem.</li> </ul>	<p>SE: 472, 505, 510, 849</p> <p>TWE: 472, 505, 510, 849</p>
<ul style="list-style-type: none"> <li>Identify the asymptotes and intercepts graphically and algebraically.</li> </ul>	<p>SE: 485–490, 491</p> <p>TWE: 485–490, 491</p>

**GLENCOE/MCGRAW-HILL  
GLENCOE ALGEBRA 2 ©2003**

**CORRELATED TO**

**NORTH CAROLINA  
MATHEMATICS STANDARD COURSE OF STUDY  
ALGEBRA 2**

<b>OBJECTIVES</b>	<b>PAGE REFERENCES</b>
2.06 Use cubic equations to model and solve problems; justify results.	
• Solve using tables and graphs.	SE: 348, 355, 356 TWE: 348, 355, 356
• Interpret constants and coefficients in the context of the problem.	SE: 346–347 TWE: 346–347

**GLENCOE/MCGRAW-HILL  
GLENCOE ALGEBRA 2 ©2003**

**CORRELATED TO  
NORTH CAROLINA  
MATHEMATICS STANDARD COURSE OF STUDY  
ALGEBRA 2**

<b>OBJECTIVES</b>	<b>PAGE REFERENCES</b>
2.07 Use equations with radical expressions to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>• Solve using tables, graphs, and algebraic properties.</li> </ul>	SE: 250–255, 279, 838 TWE: 250–255, 279, 838
<ul style="list-style-type: none"> <li>• Interpret the degree, constants, and coefficients in the context of the problem.</li> </ul>	SE: 250, 279, 838 TWE: 250, 279, 838
2.08 Use equations and inequalities with absolute value to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>• Solve using tables, graphs, and algebraic properties.</li> </ul>	SE: 28–31, 90–91, 246–247 TWE: 28–31, 90–91, 246–247
<ul style="list-style-type: none"> <li>• Interpret the constants and coefficients in the context of the problem.</li> </ul>	SE: 28–31, 246–247, 829 TWE: 28–31, 246–247, 829
2.09 Use equations of parabolas and circles to model and solve problems; justify results.	
<ul style="list-style-type: none"> <li>• Solve using tables, graphs, and algebraic properties.</li> </ul>	SE: 419–425, 426–431 TWE: 419–425, 426–431
<ul style="list-style-type: none"> <li>• Interpret the constants and coefficients in the context of the problem.</li> </ul>	SE: 421, 426, 845 TWE: 421, 426, 845
2.10 Use systems of two or more equations or inequalities to model and solve problems; justify results. Solve using tables, graphs, matrix operations, and algebraic properties	SE: 123–127, 138–144, 145–148, 202–207, 455–459, 832–833, 847 TWE: 123–127, 138–144, 145–148, 202–207, 455–459, 832–833, 847

GLENCOE/McGraw-Hill  
Atlantic Southeast Region  
6510 Jimmy Carter Boulevard  
Norcross, GA 30071  
770/613-0281  
800/731-2365