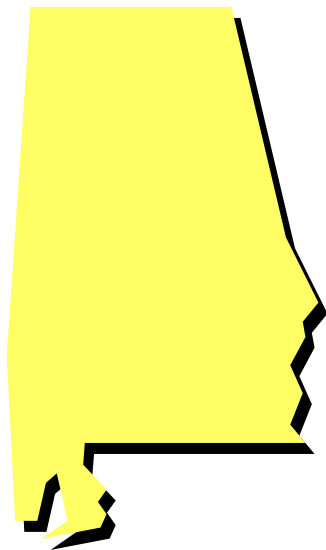
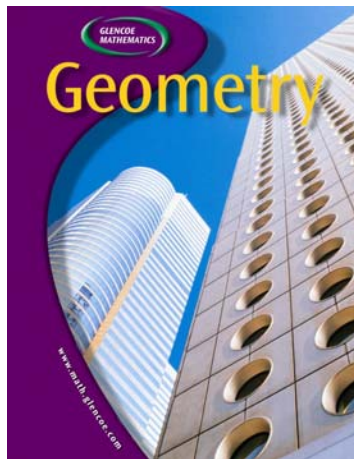


Glencoe/McGraw-Hill

Geometry ©2004

ISBN# 0-07-829637-4



correlated to

**Alabama Course of Study:
Geometry**

**GLENCOE/MCGRAW-HILL
GEOMETRY ©2004**

CORRELATED TO

**ALABAMA
COURSE OF STUDY: GEOMETRY**

OBJECTIVES	PAGE REFERENCES
Algebra	
Students will:	
1. Determine the equation of a line parallel or perpendicular to a second line through a given point.	SE: 146–147, 241–242 TWE: 146–147, 241–242
Geometry	
2. Justify theorems related to pairs of angles, including angles formed by parallel and perpendicular lines, vertical angles, adjacent angles, complementary angles, and supplementary angles.	SE: 37–40, 107–114, 126–130 TWE: 37–40, 107–114, 126–130
3. Verify the relationships among different classes of polygons by using their properties.	
<ul style="list-style-type: none"> • Determining the missing lengths of sides or measures of angles in similar polygons 	SE: 289–296, 300–301, 308–309, 316, 318 TWE: 289–296, 300–301, 308–309, 316, 318
4. Determine the measure of interior and exterior angles associated with polygons.	
<ul style="list-style-type: none"> • Verifying the formulas for the measures of interior and exterior angles of polygons inductively and deductively 	SE: 404–410 TWE: 404–410
5. Solve real-life and mathematical problems using properties and theorems related to circles, quadrilaterals, and other geometric shapes.	
<ul style="list-style-type: none"> • Determining the equation of a circle given its center and radius 	SE: 47, 178, 188, 193, 209–210, 250, 270, 290–292, 300–301, 310, 318, 344, 351, 358, 371–372, 379–380, 387, 405, 418, 433, 440, 537, 563, 570, 575–577, 596–597, 612, 618 TWE: 47, 178, 188, 193, 209–210, 250, 270, 290–292, 300–301, 310, 318, 344, 351, 358, 371–372, 379–380, 387, 405, 418, 433, 440, 537, 563, 570, 575–577, 596–597, 612, 618

**GLENCOE/MCGRAW-HILL
GEOMETRY ©2004**

CORRELATED TO

**ALABAMA
COURSE OF STUDY: GEOMETRY**

OBJECTIVES	PAGE REFERENCES
6. Apply the Pythagorean Theorem to solve application problems, expressing answers in simplified radical form or as decimal approximations, using Pythagorean triples when applicable.	SE: 28, 349, 350–356 TWE: 28, 349, 350–356
7. Use the ratios of the sides of special right triangles to find lengths of missing sides.	
<ul style="list-style-type: none"> • Deriving the ratios of the sides of 30–60–90 and 45–45–90 triangles 	SE: 357–363 TWE: 357–363
8. Deduce relationships between two triangles, including proving congruence or similarity of the triangles from given information, using them to solve problems and to establish other relationships.	
<ul style="list-style-type: none"> • Determining the geometric mean to find missing lengths in right triangles 	SE: 192–194, 200–203, 207–210, 214–215, 298–301, 316–319, 342–344 TWE: 192–194, 200–203, 207–210, 214–215, 298–301, 316–319, 342–344
9. Use inductive reasoning to make conjectures and deductive reasoning to justify conclusions.	
<ul style="list-style-type: none"> • Recognizing the limitations of justifying a conclusion through inductive reasoning 	SE: 62–64, 68–69, 76–77, 82–83, 88, 115, 255–257 TWE: 62–64, 68–69, 76–77, 82–83, 88, 115, 255–257
10. Find the missing measures of sides and angles in right triangles by applying the right triangle definitions of sine, cosine, and tangent.	SE: 364–370, 371–373 TWE: 364–370, 371–373

**GLENCOE/MCGRAW-HILL
GEOMETRY ©2004**

CORRELATED TO

**ALABAMA
COURSE OF STUDY: GEOMETRY**

OBJECTIVES	PAGE REFERENCES
11. Determine the areas and perimeters of regular polygons, including inscribed or circumscribed polygons, given the coordinates of vertices or other characteristics.	SE: 47–49, 180, 241–244, 302, 305–306, 390, 432, 442–445, 528, 595–598, 601–603, 610–616, 617–618, 642, 732–733 TWE: 47–49, 180, 241–244, 302, 305–306, 390, 432, 442–445, 528, 595–598, 601–603, 610–616, 617–618, 642, 732–733
12. Apply distance, midpoint, and slope formulas to solve problems and to confirm properties of polygons.	SE: 48–49, 295, 315, 415, 420–422, 442–448, 472, 488, 495, 597, 599, 603, 605–606, 618–621 TWE: 48–49, 295, 315, 415, 420–422, 442–448, 472, 488, 495, 597, 599, 603, 605–606, 618–621
13. Identify the coordinates of the vertices of the image of a given polygon that is translated, rotated, reflected, or dilated.	SE: 465, 467–468, 470, 472–474, 479, 481, 492, 495, 497, 600 TWE: 465, 467–468, 470, 472–474, 479, 481, 492, 495, 497, 600
14. Classify polyhedrons according to their properties, including the number of faces.	
<ul style="list-style-type: none"> • Identifying Euclidean solids 	The opportunity to address this objective is available. See the following: SE: 636–642 TWE: 636–642
Measurement	
15. Calculate measures of arcs and sectors of a circle from given information.	SE: 529–535, 536–543, 623–626 TWE: 529–535, 536–543, 623–626

**GLENCOE/MCGRAW-HILL
GEOMETRY ©2004**

CORRELATED TO

**ALABAMA
COURSE OF STUDY: GEOMETRY**

OBJECTIVES	PAGE REFERENCES
16. Calculate surface areas and volumes of solid figures, including spheres, cones, and pyramids.	
<ul style="list-style-type: none"> Developing formulas for surface area and volume of spheres, cones, and pyramids 	SE: 660–665, 666–669, 671–676, 696–700, 702–706 TWE: 660–665, 666–669, 671–676, 696–700, 702–706
<ul style="list-style-type: none"> Calculating specific missing dimensions of solid figures from surface area or volume 	SE: 656, 707–713 TWE: 656, 707–713
<ul style="list-style-type: none"> Determining the relationship between the surface areas of similar figures and volumes of similar figures 	SE: 707–713 TWE: 707–713
Data Analysis and Probability	
17. Analyze sets of data from geometric contexts to determine what, if any, relationships exist.	
<ul style="list-style-type: none"> Distinguishing between conclusions drawn when using deductive and statistical reasoning 	SE: 62–63, 82–87, 115, 117, 410 TWE: 62–63, 82–87, 115, 117, 410
<ul style="list-style-type: none"> Calculating probabilities arising in geometric contexts 	SE: 20, 622–627 TWE: 20, 622–627
18. Construct with precision a circle graph to represent data from given tables or classroom experiments.	The opportunity to address this objective is available. See the following: SE: 534 TWE: 534

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