Honors Geometry
McDougal Littell Geometry
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** Most of the homework assignments come from the workbook and we use the level C practice pages.

1. ESSENTIALS OF GEOMETRY 10 days

1.1 Identify Points, Lines, and Planes

1.2 Use Segments and Congruence

1.3 Use Midpoint and Distance Formulas

1.4 Measure and Classify Angles

- Investigating Geometry Construction: Copy and Bisect Segments and Angles

1.5 Describe Angle Pair Relationships

1.6 Classify Polygons

1.7 Find Perimeter, Circumference, and Area

- Investigating Geometry Activity: Investigate Perimeter and Area

2. REASONING AND PROOF 10 days

2.1 Use Inductive Reasoning

2.2 Analyze Conditional Statements

2.3 Apply Deductive Reasoning

2.4 Use Postulates and Diagrams

2.5 Reason using Properties from Algebra

2.6 Prove Statements about Segments and Angles

2.7 Prove Angle Pair Relationships

- Investigating Geometry Activity: Angles and Intersecting Lines

3. PARALLEL AND PERPENDICULAR LINES 12 days

3.1 Identify Pairs of Lines and Angles

- Investigating Geometry Activity: Draw and Interpret Lines

3.2 Use Parallel Lines and Transversals

- Investigating Geometry Activity: Parallel Lines and Angles

3.3 Prove Lines are Parallel

3.4 Find and Use Slopes of Lines

- Technology Activity: Investigate Slopes

3.5 Write and Graph Equations of Lines

3.6 Prove Theorems about Perpendicular Lines

4. CONGRUENT TRIANGLES 18 days

4.1 Apply Triangle Sum Properties

- Investigating Geometry Activity: Angle Sums in Triangles

4.2 Apply Congruence and Triangles

4.3 Prove Triangles Congruent by SSS

- Investigating Geometry Activity: Investigate Congruent Figures

4.4 Prove Triangles Congruent by SAS and HL

- Technology Activity: Investigate Triangles and Congruence

4.5 Prove Triangles Congruent by ASA and AAS

4.6 Use Congruent Triangles

4.7 Use Isosceles and Equilateral Triangles

5. PROPERTIES OF TRIANGLES 15 days

5.1 Midsegment Theorem and Coordinate Proof

- Investigating Geometry Activity: Investigate Segments in Triangles

5.2 Use Perpendicular Bisectors

5.3 Use Angle Bisectors of Triangles

5.4 Use Medians and Altitudes

- Investigating Geometry Activity: Intersecting Medians

- Technology Activity: Investigate Points of Concurrency

5.5 Use Inequalities in a Triangle

5.6 Inequalities in Two Triangles and Indirect Proof

6. SIMILARITY 14 days

6.1 Ratios, Proportions and the Geometric Mean

6.2 Use Proportions to Solve Geometry Problems

6.3 Use Similar Polygons

- Investigating Geometry Activity: Similar Polygons

6.4 Prove Triangles Similar by AA

6.5 Prove Triangles Similar by SSS and SAS

6.6 Use Proportionality Theorems

- Investigating Geometry Activity: Investigate Proportionality

7A. Radicals (Instructional Packet) 1 day

Simplifying Square Roots

Multiplying and Dividing Square Roots

Adding and Subtracting Square Roots

7. RIGHT TRIANGLES AND TRIGONOMETRY 14 days

7.1 Apply the Pythagorean Theorem

- Investigating Geometry Activity: Pythagorean Theorem

7.2 Use the Converse of the Pythagorean Theorem

- Investigating Geometry Activity: Converse of the Pythagorean Theorem

7.3 Use Similar Right Triangles

- Investigating Geometry Activity: Similar Right Triangles

7.4 Special Right Triangles

7.5 Apply the Tangent Ratio

7.6 Apply the Sine and Cosine Ratios

7.7 Solve Right Triangles

8. QUADRILATERALS 13 days

8.1 Find Angle Measures in Polygons

- Investigating Geometry Activity: Investigate Angle Sums in Polygons

8.2 Use Properties of Parallelograms

- Investigating Geometry Activity: Investigate Parallelograms

8.3 Show that a Quadrilateral is a Parallelogram

8.4 Properties of Rhombuses, Rectangles, and Squares

8.5 Use Properties of Trapezoids and Kites

- Investigating Geometry Activity: Midsegment of a Trapezoid

8.6 Identify Special Quadrilaterals

9. TRANSFORMATIONS 14 days

9.1 Translate Figures and Use Vectors

9.2 Use Properties of Matrices

9.3 Perform Reflections

- Investigating Geometry Activity: Reflections in the Plane

9.4 Perform Rotations

9.5 Apply Compositions of Transformations

- Investigating Geometry Activity: Double Reflections

9.6 Identify Symmetry

- Extension Activity: Tessellations with Project

9.7 Identify and Perform Dilations

- Investigating Geometry Activity: Investigate Dilations

10. CIRCLES 14 days

10.1 Use Properties of Tangents

- Investigating Geometry Activity: Explore Tangent Segments

10.2 Find Arc Measures

10.3 Apply Properties of Chords

10.4 Use Inscribed Angles and Polygons

- Investigating Geometry Activity: Explore Inscribed Angles

10.5 Apply Other Angle Relationships in Circles

10.6 Find Segment Lengths in Circles

- Investigating Geometry Activity: Investigate Segment Lengths

10.7 Write and Graph Equations of Circles

11. MEASURING LENGTH AND AREA 14 days

11.1 Areas of Triangles and Parallelograms

11.2 Areas of Trapezoids, Rhombuses, and Kites

- Investigating Geometry Activity: Areas of Trapezoids and Kites

11.3 Perimeter and Area of Similar Figures

11.4 Circumference and Arc Length

11.5 Areas of Circles and Sectors

11.6 Areas of Regular Polygons

11.7 Use Geometric Probability

- Investigating Geometry Activity: Investigate Geometric Probability

12. SURFACE AREA AND VOLUME 12 days

12.1 Explore Solids

- Investigating Geometry Activity: Investigate Solids

12.2 Surface Area of Prisms and Cylinders

- Investigating Geometry Activity Investigate Surface Area

12.3 Investigate Area of Pyramids and Cones

12.4 Volume of Prisms and Cylinders

12.5 Volume of Pyramids and Cones

- Investigating Geometry Activity: Investigate the Volume of a Pyramid

12.6 Surface Area and Volume of Spheres

12.7 Explore Similar Solids

- Investigating Geometry Activity: Investigate Similar