

Core Connections Geometry Outline

Chapter 8: Polygons and Circles

<u>Lesson</u>	<u>Core Problems</u>	<u>Homework</u>	<u>Objectives</u>
8.1.1 8.1.2	1, 3, 4 13-14	6-12	Pinwheels and Polygons Interior Angles of Polygons Angles of Regular Polygons Regular Polygon Angle Connections Finding Areas of Regular Polygons
8.1.2 8.1.3	15 24-26	17-23 29-35	
8.1.4 8.1.5	36-37 47	40-46	
8.1.5 8.2.1	49-50 67-69	53-66 71-77	
8.2.2 8.3.1	78-79 90	83-89	Area Ratios of Similar Figures Ratios of Similarity
8.3.1 8.3.2	91 100, 101, 103	93-99 105-111	A Special Ratio Area and Circumference of a Circle Circles in Context
8.3.3	112-115	116-129	
Practice Test Closure		130-140	Practice Test Ch. 8 Closure Activity

Guiding Questions:

- Can I find the shortcuts and generalize the rules for finding perimeters and areas of polygons?

In this chapter, you will learn:

- Special types of polygons such as regular and non-convex polygons.
- How the measures of the interior and exterior angles of a regular polygon are related to the number of sides of the polygon.
- How the areas of similar figures are related.
- How to find the area and circumference of a circle and parts of circles and use this ability to solve problems in various contexts.

Geometry Chapter 8 Learning Targets

Formative Learning Targets

Self-Assessment

No Clue	On the right track	Mastery

1. Perimeter, Area, and Volume Scale Factors

- I can use the linear scale factor of similar shapes to determine the area and perimeter of an enlarged or reduced shape.

2. Polygon Angle Web

No Clue	On the right track	Mastery

- I can use the Polygon Angle Web to determine the number of sides of polygon, the sum of the interior angles, the measure of each interior angle in a regular polygon, or the measure of each exterior in a regular polygon.

No Clue	On the right track	Mastery

3. Area of Regular Polygons

- I can find the area of a regular polygon.

4. Area and Circumference of Circles and Sectors

No Clue	On the right track	Mastery

- I can find the area and circumference of circles.
- I can find the area and perimeter of sectors.

Summative Learning Targets

5. Angle Relationships

No Clue	On the right track	Mastery

- I can solve problems using angle relationships.
- I can name various types of angles and state whether they are congruent or supplementary.

6. Area and Perimeter by Dissection

No Clue	On the right track	Mastery

- I can find the area and perimeter of a composite shape by dissection.

7. Proof

No Clue	On the right track	Mastery

- I can prove properties of congruent triangles using a flowchart or a two-column proof.

8. Midpoint and Distance

No Clue	On the right track	Mastery

- I can graph points on a coordinate grid.
- I can use the midpoint of a segment to find an endpoint of a segment.
- I can find the length of a segment.
- I can find the midpoint of a segment and identify its coordinate.

9. Properties of Polygons

No Clue	On the right track	Mastery

- I can use properties of polygons to solve for missing angle measures and side lengths in polygons.