<name>

Class: Honors Geometry

Date: <date>

Topic: Lesson 1-7 (Perimeter, Circumference & Area)

Polygon A closed figure in a plane

Formed by connected line segments

No gaps

Intersect only at endpoints

Example: square or rectangle but <u>not</u> a circle

Circle Set of all points in a plane a given distance from the center.

Radius is distance from center to edge.

Diameter is distance across through the center.

Perimeter of polygon | Sum of lengths each side

Square: P = 4s

Rectangle: P = 2b + 2h

PI Symbol π

Is the ratio of the circumference and diameter

Circumference "Perimeter" for a circle

 $C = \pi d = 2\pi r$

Area How much surface space the shape takes up

Square: $A = s^2$

Rectangle: A = bh

Circle: $A = \pi r^2$

Postulate 1-9 Two figures are congruent if their areas are equal

Postulate 1-10 Area of a region is the sum of the areas of **non-**

overlapping parts.

<diagram and example as needed>