Name _____ Hr _____

Chapter 8 Guided Notes
Quadrilaterals

NOTE
This is the final chapter of the semester!

Chapter Start Date:_____
Chapter End Date:_____
Test Day/Date:_____

Geometry • Fall Semester

8.1 Find Angle Measures in Polygons

Term	Definition	Example
Regular Polygon		
consecutive vertices		
nonconsecutive vertices		
diagonal		
Theorem 8.1 Polygon Interior Angles Thm.		
Corollary to Thm. 8.1 Interior Angles of a Quad		
Theorem 8.2 Polygon Exterior Angles Theorem		

n	Name	Num of Sides	Num of Δs	Int. Angle Sum	Ext. Angle Sum
3					
4					
5					
6					
7					
8					
9					
10					
n					

8.2 Use Properties of Parallelograms

Term	Definition	Example
parallelogram		
Theorem 8.3		
Theorem 8.4		
Theorem 8.5		
Theorem 8.6		

8.3 Show that a Quadrilateral is a Parallelogram

Term	Definition	Example
Theorem 8.7		
Theorem 8.8		
Theorem 8.9		
Theorem 8.10		

A quadrilateral is a parallelogram if any one of the following is true.	

8.4 Properties of Rhombuses, Rectangles, and Squares

Term	Definition	Example
rhombus		
rectangle		
square		
Rhombus Corollary		
Rectangle Corollary		
Square Corollary		
Venn Diagram		
Theorem 8.11		
Theorem 8.12		
Theorem 8.13		

If a quadrilateral is a rectangle, then the following properties hold true.

8.5 Use Properties of Trapezoids and Kites

Term	Definition	Example
trapezoid		
parts of trapezoids	1. 2. 3.	
isosceles trapezoid		
Theorem 8.14		
Theorem 8.15		
Theorem 8.16		
midsegment of a trapezoid (median)		
Theorem 8.17 Midsegment Theorem for Trapezoids		

kite		
Theorem 8.18		
Theorem 8.19		

8.6 Identify Special Quadrilaterals

Quadrilateral Hierarchy Diagram

Properties of Quadrilaterals						
Property	Parallelogram	Rectangle	Rhombus	Square	Kite	Trapezoid
All sides are ≅.						
Exactly 1 pair of opposite sides are ≅.						
Both pairs of opposite sides are ≅.						
Both pairs of opposite sides are //.						
Exactly one pair of opposite sides are //.						
All angles are ≅.						
Exactly one pair of opposite angles are ≅.						
Both pairs of opposite angles are ≅.						
Diagonals are ⊥.						
Diagonals are ≅.						
Diagonals bisect each other.						