Name _____ Hr ____

Chapter 11 Guided Notes

Measuring Length & Area

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

11.1 Areas of Triangles and Parallelograms

Term	Definition	Example
area		
perimeter		
Postulate 24 Area of a Square Postulate		
Postulate 25 Area Congruence Postulate		
Postulate 26 Area Addition Postulate		
Theorem 11.1 Area of a Rectangle		
base of a parallelogram		
height of a parallelogram		
Theorem 11.2 Area of a Parallelogram		
Theorem 11.3 Area of a Triangle		
height of a triangle		

11.2 Areas of Trapezoids, Rhombuses, and Kites

Term	Definition	Example
height of a trapezoid		
Theorem 11.4 Area of a Trapezoid		
Theorem 11.5 Area of a Rhombus		
Theorem 11.6 Area of a Kite		

Summary of Area Formulas	
Square	
Rectangle	
Parallelogram	
Triangle	
Triangle (with trig)	
Equilateral Δ	
Hero/Heron's Form	
Brahmagupta's Form.	
Trapezoid	
Trapezoid	
Rhombus	
Kite	
Circle	

Chapter 11 Extension: Hero and Brahmagupta

Term	Definition	Example
Semi-perimter		
Hero's (Heron's) Formula		
Inscribe Quadrilaterl		
Brahmapugta's Formula		

11.3 Perimeter and Area of Similar Figures

Term	Definition	Example
Theorem 11.7 Areas of Similar Polygons		
regular polygons		
circles		

11.4 Circumference and Arc Length

Term	Definition	Example
circumference		
Theorem 11.8 Circumference of a Circle		
arc length		
Arc Length Corollary		
Segment of a Circle		

11.5 Areas of Circles and Sectors

Term	Definition	Example
Theorem 11.9 Area of a Circle		
sector of a circle		
Theorem 11.10 Area of a Sector		

11.6 Areas of Regular Polygons

Term	Definition	Example
center of the polygon		
radius of the polygon		
apothem of the polygon		
central angle of a regular polygon		
Theorem 11.11 Area of a Regular Polygon		
To find the area of a Regular Polygon you can also		

11.7 Use Geometric Probability

Term	Definition	Example
probability		
geometric probability		
Probability and Length		
Probability and Area		