Geometry: Reference Sheet

Name: _____

Chapter	Name	Formula
1	Midpoint	$\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$
	Distance	$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
3	Slope	$m = \frac{y_2 - y_1}{x_2 - x_1}$
	Slope-Intercept Form of a Line	y = mx + b
7	Pythagorean Theorem	$a^2 + b^2 = c^2$
	Soh – Cah – Toa	$\sin x = \frac{opp}{hyp}; \cos x = \frac{adj}{hyp}; \tan x = \frac{opp}{adj}$
	Law of Sines	$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$
	Law of Cosines	$a^{2} = b^{2} + c^{2} - 2bc\cos A$ $b^{2} = a^{2} + c^{2} - 2ac\cos B$ $c^{2} = a^{2} + b^{2} - 2ab\cos C$
8	Sum of Interior Angles of a Polygon	S = 180(n-2)
	One Interior Angle of a Polygon	$\frac{180(n-2)}{n}$
	Sum of Exterior Angles of a Polygon	360°
	One Exterior Angle of a Polygon	$\frac{360}{n}$
	Properties of a Rectangle	Diagonals are congruentFour right angles
	Properties of a Trapezoid	Two times the median = sum of bases.

Chapter	Name	Formula
10	Circumference of a Circle	$C=2\pi r$ or $C=\pi d$
	Area of a Circle	$A = \pi r^2$
	Area of Shaded Region of Concentric Circles	$A = \pi \left(r_L^2 - r_S^2 \right)$
	Arc Length	$\left(\frac{\theta}{360}\right) = \frac{x}{2\pi r}$
	Standard Equation of a Circle	$(x-h)^2 + (y-k)^2 = r^2$ Where (h,k) is the center of the circle