**Geometry Review Topics – Chapter 8**

* Radius/tangent formulas with circles
	+ A radius/tangent forms a right angle, allowing use of trig ratios and Pythagorean theorem
	+ Tangent/tangent angles are add up to  with minor arc they form
* Circumference and arc length of circles
	+ Circumference:  or 
		- r is the radius of the circle and d the diameter
	+ Arc Length:  or 
		- r is the radius, A is the central angle in degrees, and  is the central angle in radians
* Area and sector areas of circles
	+ Area: 
		- r is the radius of the circle
	+ Sector Area:  or 
		- r is the radius, A is the central angle in degrees, and  is the central angle in radians
* Surface area and volume of circular solids
	+ Cylinder:  and 
		- r is the radius of the base, h is the height
	+ Cone:  and 
		- r is the radius of the base,  is the slant height, h is the height
* Areas of equilateral and isosceles triangles
	+ Equilateral triangle only: 
		- s is the length of one side of the triangle
	+ Any triangle (given 1 side and perpendicular height): 
		- b is the base, h is the height, base and height are perpendicular
	+ Non-right triangle (given 2 sides and included angle): 
		- a and b are any two sides in a triangle,  is the angle between
	+ Any triangle (given 3 sides and no angles): 
		- a,b, c are the side lengths, s is the semiperimeter
* Special right triangles (triples, 30-60-90, 45-45-90)
	+ 4 main triples: 3-4-5, 5-12-13, 8-15-17, 7-24-25
	+ 30-60-90: 
	+ 45-45-90: 
* Basic trig ratios (sin, cos, tan)
	+ SOH CAH TOA
	+  , , 