M2 Unit 6 - Trigonometry Quizlet

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	30-60-90 Triangle Theorem	In a 30°-60°-90° triangle, the length of the hypotenuse is twice the length of the shorter leg. The length of the longer leg is $\sqrt{3}$ times the length of the shorter leg.	19. Tangent	The tangent of an angle is equal to the length of the leg opposite the angle divided by the length of the leg adjacent to the angle. (opposite / adjacent)
	45-45-90 Triangle Theorem	In a $45^{\circ}-45^{\circ}-90^{\circ}$ triangle, both legs are congruent and the length of the hypotenuse is $\sqrt{2}$ times the length of a leg.	20. Theorem 67	If the square of the length of the longest side of a triangle is greater than the sum of the squares of the lengths of the other
	Angle of Depression	The angle below a horizontal reference.	21 Theorem 68	two sides, then the triangle is obtuse. If the square of the length of the longest
4.	Angle of Elevation	The angle above a horizontal reference.		side of a triangle is less than the sum of the squares of the lengths of the other
5.	Arccosine	The inverse of the cosine function (\cos^{-1})		two sides, then the triangle is acute.
6.	Arcsine	The inverse of the sine function (\sin^{-1})	22. Trigonometric Ratios	Equivalent ratios for the corresponding sides of similar right triangles.
7.	Arctangent	The inverse of the tangent function (tan ⁻¹)	Ratios	sides of similar right thangles.
1	Converse of the Pythagorean Theorem	If the sum of the squares of the lengths of two sides of a triangle is equal to the square of the length of the third side, then the triangle is a right triangle.		
9.	Cosecant	The reciprocal ratio of sine (1 / sin(x))		
10.	Cosine	The cosine of an angle is equal to the length of the leg adjacent to the angle divided by the length of the hypotenuse. (adjacent / hypotenuse)		
11.	Cotangent	The reciprocal ratio of tangent (1 / tan(x))		
	Exterior Angle of a Polygon	An angle formed when one side of the polygon is extended.		
	Pythagorean Theorem	If a triangle is a right triangle, then the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse.		
	Pythagorean Triple	A set of nonzero whole numbers a, b, and c that satisfy the equation $a^2+b^2=c^2$.		
I	Remote Interior Angles	Two angles of a triangle that aren't adjacent to the exterior angle.		
16.	Secant	The reciprocal ratio of cosine (1 / cos(x))		
17.	Sine	The sine of an angle is equal to the length of the leg opposite the angle divided by the length of the hypotenuse. (opposite / hypotenuse)		
18.	Sinusoidal	Of, relating to, shaped like, or varying according to a sine curve or sine wave.		