

Trigonometric Identities	
Basic	$\tan x = \frac{\sin x}{\cos x}$ $\sec x = \frac{1}{\cos x}; \csc x = \frac{1}{\sin x}; \cot x = \frac{1}{\tan x}$
Pythagorean	$\sin^2 x + \cos^2 x = 1$ $\tan^2 x + 1 = \sec^2 x$ $1 + \cot^2 x = \csc^2 x$
Sum & difference	$\sin(A + B) = \sin A \cos B + \cos A \sin B$ $\sin(A - B) = \sin A \cos B - \cos A \sin B$ $\cos(A + B) = \cos A \cos B - \sin A \sin B$ $\cos(A - B) = \cos A \cos B + \sin A \sin B$
Double angle	$\sin 2A = 2 \sin A \cos A$ $\cos 2A = \cos^2 A - \sin^2 A$ $\cos 2A = 2 \cos^2 A - 1$ $\cos 2A = 1 - 2 \sin^2 A$
	$\cos^2 A = \frac{1 + \cos 2A}{2}$ $\sin^2 A = \frac{1 - \cos 2A}{2}$