



Anna Hanson

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$\sin(A \pm B) = \sin A \cos B \pm \cos A \sin B$   
 $\cos(A \pm B) = \cos A \cos B \mp \sin A \sin B$   
 $\sin 2A = 2 \sin A \cos A$   
 $\cos 2A = \cos^2 A - \sin^2 A$   
 $\tan 2A = \frac{2 \tan A}{1 - \tan^2 A}$   
 $\sin^2 A + \cos^2 A = 1$   
 $\sec^2 A = 1 + \tan^2 A$   
 $\csc^2 A = 1 + \cot^2 A$   
 $\sin^2 A = \frac{1 - \cos 2A}{2}$   
 $\cos^2 A = \frac{1 + \cos 2A}{2}$   
 $\tan^2 A = \frac{1 - \cos 2A}{1 + \cos 2A}$   
 $\cot^2 A = \frac{1 + \cos 2A}{1 - \cos 2A}$   
 $\sin A = \cos(90^\circ - A)$   
 $\cos A = \sin(90^\circ - A)$   
 $\tan A = \cot(90^\circ - A)$   
 $\cot A = \tan(90^\circ - A)$   
 $\sin(A + 90^\circ) = \cos A$   
 $\cos(A + 90^\circ) = -\sin A$   
 $\sin(A - 90^\circ) = -\cos A$   
 $\cos(A - 90^\circ) = \sin A$   
 $\sin^2 A = \frac{1 - \cos 2A}{2}$   
 $\cos^2 A = \frac{1 + \cos 2A}{2}$   
 $\tan^2 A = \frac{1 - \cos 2A}{1 + \cos 2A}$   
 $\cot^2 A = \frac{1 + \cos 2A}{1 - \cos 2A}$   
 $\sin A = \cos(90^\circ - A)$   
 $\cos A = \sin(90^\circ - A)$   
 $\tan A = \cot(90^\circ - A)$   
 $\cot A = \tan(90^\circ - A)$   
 $\sin(A + 90^\circ) = \cos A$   
 $\cos(A + 90^\circ) = -\sin A$   
 $\sin(A - 90^\circ) = -\cos A$   
 $\cos(A - 90^\circ) = \sin A$

$\cos(A - B) = \cos A \cos B + \sin A \sin B$   
 $\cos(A + B) = \cos A \cos B - \sin A \sin B$   
 $\sin(A - B) = \sin A \cos B - \cos A \sin B$   
 $\sin(A + B) = \sin A \cos B + \cos A \sin B$   
 $\cos(A - B) = \cos A \cos B + \sin A \sin B$   
 $\cos(A + B) = \cos A \cos B - \sin A \sin B$   
 $\sin(A - B) = \sin A \cos B - \cos A \sin B$   
 $\sin(A + B) = \sin A \cos B + \cos A \sin B$