

## TRIGONOMETRIK FORMÜLLER

1.  $\sin(A \pm B) = \sin A \cos B \pm \cos A \sin B$
2.  $\cos(A \pm B) = \cos A \cos B \mp \sin A \sin B$
3.  $\tan(A \pm B) = \frac{\tan A \pm \tan B}{1 \mp \tan A \tan B}$
4.  $\sin A \sin B = \frac{1}{2} \cos(A - B) - \frac{1}{2} \cos(A + B)$
5.  $\cos A \cos B = \frac{1}{2} \cos(A - B) + \frac{1}{2} \cos(A + B)$
6.  $\sin A \cos B = \frac{1}{2} \sin(A - B) + \frac{1}{2} \sin(A + B)$
7.  $\sin A + \sin B = 2 \sin \frac{1}{2}(A + B) \cos \frac{1}{2}(A - B)$
8.  $\sin A - \sin B = 2 \cos \frac{1}{2}(A + B) \sin \frac{1}{2}(A - B)$
9.  $\cos A + \cos B = 2 \cos \frac{1}{2}(A + B) \cos \frac{1}{2}(A - B)$
10.  $\cos A - \cos B = -2 \sin \frac{1}{2}(A + B) \sin \frac{1}{2}(A - B)$
11.  $\sin^2 A + \cos^2 B = 1$
12.  $\sin 2A = 2 \sin A \cos A$
13.  $\cos 2A = \cos^2 A - \sin^2 A$
14.  $\sec^2 A = 1 + \tan^2 A$
15.  $\csc^2 A = 1 + \cot^2 A$
16.  $2 \cos^2 A = 1 + \cos 2A$
17.  $2 \sin^2 A = 1 - \cos 2A$