Formule goniometriche

addizione e sottrazione	
$sin(\alpha+\beta)=\sin(\alpha)\cdot\cos(\beta)+\sin(\beta)\cdot\cos(\alpha)$	$tan(\alpha+\beta)=\frac{\tan(\alpha)+\tan(\beta)}{1-\tan(\alpha)\cdot\tan(\beta)}$
$sin(\alpha-\beta)=\sin(\alpha)\cdot\cos(\beta)-\sin(\beta)\cdot\cos(\alpha)$	$tg(\alpha-\beta)=\frac{\tan(\alpha)-\tan(\beta)}{1+\tan(\alpha)\cdot\tan(\beta)}$
$cos(\alpha+\beta)=\cos(\alpha)\cdot\cos(\beta)-\sin(\alpha)\cdot\sin(\beta)$	$cot(\alpha+\beta)=\frac{\cot(\alpha)\cdot\cot(\beta)-1}{\cot(\beta)+\cot(\alpha)}$
$cos(\alpha-\beta)=\cos(\alpha)\cdot\cos(\beta)+\sin(\alpha)\cdot\sin(\beta)$	$cot(\alpha-\beta)=\frac{\cot(\alpha)\cdot\cot(\beta)+1}{\cot(\beta)-\cot(\alpha)}$

duplicazione		
$sin(2\alpha)=2sin(\alpha)\cdot\cos(\alpha)$		$tan(2\alpha)=\frac{2\tan(\alpha)}{1-tan^2(\alpha)}=\frac{2}{\cot(\alpha)-\tan(\alpha)}$
$\cos(2\alpha)=cos^2(\alpha)-sin^2(\alpha)$	$\cos(2\alpha)=1-2sin^2(\alpha)$ $\cos(2\alpha)=2cos^2(\alpha)-1$	$cot(2\alpha)=\frac{cot^2(\alpha)-1}{2\cot(\alpha)}=\frac{\cot(\alpha)-\tan(\alpha)}{2}$

bisezione	
$sin\left(\frac{\alpha}{2}\right)=\pm\sqrt{\frac{1-\cos(\alpha)}{2}}$	$tan\left(\frac{\alpha}{2}\right)=\pm\sqrt{\frac{1-\cos(\alpha)}{1+\cos(\alpha)}}=\frac{\sin(\alpha)}{1+\cos(\alpha)}=\frac{1-\cos(\alpha)}{\sin(\alpha)}$
$cos\left(\frac{\alpha}{2}\right)=\pm\sqrt{\frac{1+\cos(\alpha)}{2}}$	$cot\left(\frac{\alpha}{2}\right)=\pm\sqrt{\frac{1+\cos(\alpha)}{1-\cos(\alpha)}}=\frac{\sin(\alpha)}{1-\cos(\alpha)}=\frac{1+\cos(\alpha)}{\sin(\alpha)}$

parametriche o razionali $t=tg\left(\frac{\alpha}{2}\right)$	
$sin(\alpha)=\frac{2t}{1+t^2}$	$tan(\alpha)=\frac{2t}{1-t^2}$
$\cos(\alpha)=\frac{1-t^2}{1+t^2}$	$cot(\alpha)=\frac{1-t^2}{2t}$

prostaferesi	
$sin\ (p)+sin\ (q)=2\ sin\frac{p+q}{2}\cdot cos\frac{p-q}{2}$	$\sin(p)-sin\ (q)=2\ sin\frac{p-q}{2}\cdot cos\frac{p+q}{2}$
$cos\ (p)+cos\ (q)=2\ cos\frac{p+q}{2}\cdot cos\frac{p-q}{2}$	$\cos(p)-\cos(q)=-2\ sin\frac{p+q}{2}\cdot sin\frac{p-q}{2}$

Werner	
$\sin(\alpha)\cdot\sin(\beta)=\frac{cos(\alpha-\beta)-cos(\alpha+\beta)}{2}$	$\sin(\alpha)\cdot\cos(\beta)=\frac{sin(\alpha-\beta)+sin(\alpha+\beta)}{2}$
$\cos(\alpha)\cdot\cos(\beta)=\frac{cos(\alpha-\beta)+cos(\alpha+\beta)}{2}$	