Temel Formuller

$\sin^2x+\cos^2x=1$

$\cos(x+y)=\cos x \cos y - \sin x \sin y$

$\sin(x+y)=\sin x \cos y + \sin y \cos x$

$\sin(-x)=- \sin x$

$\cos(-x)=\cos(x)$

$\tan(-x)=-\tan(x)$

$\cos(x-y)=\cos x \cos y + \sin x \sin y$

$\sin(x-y)=\sin x \cos y - \sin y \cos x$

$\cos x \cos y=\frac{1}{2}[\cos(x+y)+\cos(x-y)]$

$\sin x \sin y =\frac{1}{2}[\cos(x-y)- \cos(x+y)]$

$\sin x \cos y =\frac{1}{2}[\sin(x+y)+ \sin(x-y)]$

$\cos(x+90)=- \sin x$

$\cos(x- 90)= \sin x$

$\sin(x+ 90)= \cos x$

$\sin(x- 90)= -\cos x$

$\cos(90-q)= \sin q$

$\sin(90-q)= \cos q$

$\cos(2x) = 2\cos^2 x -1$

$\cos^2 x =\frac{1}{2}[1+\cos(2x)]$

$\cos(2x) =1- 2\sin^2 x$

$\sin^2 x =\frac{1}{2}[1-\cos(2x)]$

$\sin 2x =2 \sin x \cos x$

$\cos q = 2\cos^2 \frac{q}{2} -1$

$\cos q = 1-2\sin^2 \frac{q}{2}$

$\sin q =2 \sin \frac{q}{2} \cos \frac{q}{2}$

$\sin^3 q= = - \frac{1}{4} \sin(3q) + \frac{3}{4} \sin q$

$\sin(3q)= -4\sin^3 q +3\sin q$

$\cos^3 q= = \frac{1}{4} \cos 3q + \frac{3}{4} \cos q$

$\cos 3q=4 \cos^3 q -3 \cos q$

$$\tan(x+y)=\frac{\tan x+\tan y}{1-\tan x \tan y}$$

$$\tan(x-y)=\frac{\tan x-\tan y}{1+\tan x \tan y}$$

$$\tan(2x)=\frac{2\tan x}{1-\tan^2 x}$$

$$\tan(q)=\frac{2\tan\frac{q}{2}}{1-\tan^2\frac{q}{2}}$$

$$\tan x=\frac{\sin x}{\sqrt{1-\sin^2 x}}=\frac{\sqrt{1-\cos^2 x}}{\cos x}$$

$$\sin x=\frac{\tan x}{\sqrt{1+\tan^2 x}}$$

$$\cos x=\frac{1}{\sqrt{1+\tan^2 x}}$$

$$\cos x=\frac{1-\tan\frac{x}{2}}{1+\tan^2\frac{x}{2}}$$

$$\sin x=\frac{2\tan\frac{x}{2}}{1+\tan^2\frac{x}{2}}$$

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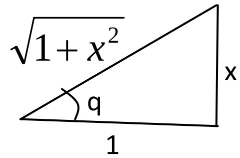
Basit hatirlama teknigi



$\tan q =\frac{x}{1}=x$

$\sin q =\frac{x}{\sqrt{1+x^2}}=\frac{\tan q}{\sqrt{1+\tan^2 q}}$

$\cos q =\frac{1}{\sqrt{1+x^2}}=\frac{1}{\sqrt{1+\tan^2 q}}$

$\sin 2q=2\sin q \cos q=\frac{2x}{1+x^2}=\frac{2\tan q}{1+\tan^2 q}$

$2q=p \quad q=p/2$

$$\sin p =\frac{2\tan\frac{p}{2}}{1+\tan^2\frac{p}{2}}$$