



Engueuem la teva intel·ligència!

Centre d'Estudis Edukat

Reforç escolar i Tècniques d'estudi
Primària – ESO – Batxillerat – Proves d'accés

Pitàgores	Angle doble	Angle meitat
$\sin^2 x + \cos^2 x = 1$	$\sin(2x) = 2 * \sin x * \cos x$	$\sin \frac{x}{2} = \pm \sqrt{\frac{1 - \cos x}{2}}$
$1 + \operatorname{tg}^2 x = \sec^2 x$	$\cos(2x) = \cos^2 x - \sin^2 x$	$\cos \frac{x}{2} = \pm \sqrt{\frac{1 + \cos x}{2}}$
	$\cos(2x) = 2 * \cos^2 x - 1$	$\tan \frac{x}{2} = \frac{1 - \cos x}{\sin x}$
	$\cos(2x) = 1 - 2 * \sin^2 x$	$\tan \frac{x}{2} = \frac{\sin x}{1 + \cos x}$
	$\tan(2x) = \frac{2 \tan x}{1 - \tan^2 x}$	
Potències	Suma i diferència	
$\sin^2 x = \frac{1 - \cos 2x}{2}$	$\sin(x + y) = \sin x * \cos y + \cos x * \sin y$	
$\cos^2 x = \frac{1 + \cos 2x}{2}$	$\sin(x - y) = \sin x * \cos y - \cos x * \sin y$	
$\tan^2 x = \frac{1 - \cos 2x}{1 + \cos 2x}$	$\cos(x + y) = \cos x * \cos y - \sin x * \sin y$	
	$\cos(x - y) = \cos x * \cos y + \sin x * \sin y$	
	$\tan(x + y) = \frac{\tan x + \tan y}{1 - \tan x * \tan y}$	
	$\tan(x - y) = \frac{\tan x - \tan y}{1 + \tan x * \tan y}$	
Suma a producte	Producte a suma	
$\sin x + \sin y = 2 \sin \frac{x+y}{2} * \cos \frac{x-y}{2}$	$\sin x * \sin y = \frac{1}{2} * [\cos(x - y) - \cos(x + y)]$	
$\sin x - \sin y = 2 * \cos \frac{x+y}{2} * \sin \frac{x-y}{2}$	$\cos x * \cos y = \frac{1}{2} * [\cos(x - y) + \cos(x + y)]$	
$\cos x + \cos y = 2 * \cos \frac{x+y}{2} * \cos \frac{x-y}{2}$	$\sin x * \cos y = \frac{1}{2} * [\sin(x + y) + \sin(x - y)]$	
$\cos x - \cos y = -2 * \sin \frac{x+y}{2} * \sin \frac{x-y}{2}$	$\tan x * \tan y = \frac{\tan x + \tan y}{\cot x + \cot y}$	
$\tan x + \tan y = \frac{\sin(x + y)}{\cos x * \cos y}$	$\tan x * \cot y = \frac{\tan x + \cot y}{\cot x + \tan y}$	
$\tan x - \tan y = \frac{\sin(x - y)}{\cos x * \cos y}$		