

REDUCING FUNCTIONS OF AN ANGLE IN ANY QUADRANT

$\sin(\frac{\pi}{2} - \theta) = \cos \theta$ $\cos(\frac{\pi}{2} - \theta) = \sin \theta$ $\tan(\frac{\pi}{2} - \theta) = \cot \theta$	$\sin(\frac{\pi}{2} + \theta) = \cos \theta$ $\cos(\frac{\pi}{2} + \theta) = -\sin \theta$ $\tan(\frac{\pi}{2} + \theta) = -\cot \theta$
$\sin(\frac{3\pi}{2} - \theta) = -\cos \theta$ $\cos(\frac{3\pi}{2} - \theta) = -\sin \theta$ $\tan(\frac{3\pi}{2} - \theta) = \cot \theta$	$\sin(\frac{3\pi}{2} + \theta) = -\cos \theta$ $\cos(\frac{3\pi}{2} + \theta) = \sin \theta$ $\tan(\frac{3\pi}{2} + \theta) = -\cot \theta$
$\sin(\pi - \theta) = \sin \theta$ $\cos(\pi - \theta) = -\cos \theta$ $\tan(\pi - \theta) = -\tan \theta$	$\sin(\pi + \theta) = -\sin \theta$ $\cos(\pi + \theta) = -\cos \theta$ $\tan(\pi + \theta) = \tan \theta$
$\sin(2\pi - \theta) = -\sin \theta$ $\cos(2\pi - \theta) = \cos \theta$ $\tan(2\pi - \theta) = -\tan \theta$	$\sin(2\pi + \theta) = \sin \theta$ $\cos(2\pi + \theta) = \cos \theta$ $\tan(2\pi + \theta) = \tan \theta$

NOTE:

If θ is an acute angle, then any function of $(2\pi + \theta)$, $(2\pi - \theta)$, $(\pi + \theta)$ or $(\pi - \theta)$ is reducible to the same-named function of θ , whereas any function of $(\pi/2 - \theta)$, $(\pi/2 + \theta)$, $(3\pi/2 - \theta)$ or $(3\pi/2 + \theta)$ is reducible to the complementary-named function of θ .

Trig. functions signs

