

Angoli associati

angoli supplementari	
secondo quadrante	
$\text{sen}(180^\circ - \alpha) = \text{sen } \alpha$	$\text{sen}(\pi - \alpha) = \text{sen } \alpha$
$\text{cos}(180^\circ - \alpha) = -\text{cos } \alpha$	$\text{cos}(\pi - \alpha) = -\text{cos } \alpha$
$\text{tg}(180^\circ - \alpha) = -\text{tg } \alpha$	$\text{tg}(\pi - \alpha) = -\text{tg } \alpha$
$\text{ctg}(180^\circ - \alpha) = -\text{ctg } \alpha$	$\text{ctg}(\pi - \alpha) = -\text{ctg } \alpha$

angoli complementari	
primo quadrante	
$\text{sen}(90^\circ - \alpha) = \text{cos } \alpha$	$\text{sen}\left(\frac{\pi}{2} - \alpha\right) = \text{cos } \alpha$
$\text{cos}(90^\circ - \alpha) = \text{sen } \alpha$	$\text{cos}\left(\frac{\pi}{2} - \alpha\right) = \text{sen } \alpha$
$\text{tg}(90^\circ - \alpha) = \text{ctg } \alpha$	$\text{tg}\left(\frac{\pi}{2} - \alpha\right) = \text{ctg } \alpha$
$\text{ctg}(90^\circ - \alpha) = \text{tg } \alpha$	$\text{ctg}\left(\frac{\pi}{2} - \alpha\right) = \text{tg } \alpha$

angoli che differiscono di un angolo piatto	
terzo quadrante	
$\text{sen}(180^\circ + \alpha) = -\text{sen } \alpha$	$\text{sen}(\pi + \alpha) = -\text{sen } \alpha$
$\text{cos}(180^\circ + \alpha) = -\text{cos } \alpha$	$\text{cos}(\pi + \alpha) = -\text{cos } \alpha$
$\text{tg}(180^\circ + \alpha) = \text{tg } \alpha$	$\text{tg}(\pi + \alpha) = \text{tg } \alpha$
$\text{ctg}(180^\circ + \alpha) = \text{ctg } \alpha$	$\text{ctg}(\pi + \alpha) = \text{ctg } \alpha$

angoli che differiscono di un angolo retto	
secondo quadrante	
$\text{sen}(90^\circ + \alpha) = \text{cos } \alpha$	$\text{sen}\left(\frac{\pi}{2} + \alpha\right) = \text{cos } \alpha$
$\text{cos}(90^\circ + \alpha) = -\text{sen } \alpha$	$\text{cos}\left(\frac{\pi}{2} + \alpha\right) = -\text{sen } \alpha$
$\text{tg}(90^\circ + \alpha) = -\text{ctg } \alpha$	$\text{tg}\left(\frac{\pi}{2} + \alpha\right) = -\text{ctg } \alpha$
$\text{ctg}(90^\circ + \alpha) = -\text{tg } \alpha$	$\text{ctg}\left(\frac{\pi}{2} + \alpha\right) = -\text{tg } \alpha$

angoli esplementari	
quarto quadrante	
$\text{sen}(360^\circ - \alpha) = -\text{sen } \alpha$	$\text{sen}(2\pi - \alpha) = -\text{sen } \alpha$
$\text{cos}(360^\circ - \alpha) = \text{cos } \alpha$	$\text{cos}(2\pi - \alpha) = \text{cos } \alpha$
$\text{tg}(360^\circ - \alpha) = -\text{tg } \alpha$	$\text{tg}(2\pi - \alpha) = -\text{tg } \alpha$
$\text{ctg}(360^\circ - \alpha) = -\text{ctg } \alpha$	$\text{ctg}(2\pi - \alpha) = -\text{ctg } \alpha$

angoli la cui somma è 270°	
terzo quadrante	
$\text{sen}(270^\circ - \alpha) = -\text{cos } \alpha$	$\text{sen}\left(\frac{3}{2}\pi - \alpha\right) = -\text{cos } \alpha$
$\text{cos}(270^\circ - \alpha) = -\text{sen } \alpha$	$\text{cos}\left(\frac{3}{2}\pi - \alpha\right) = -\text{sen } \alpha$
$\text{tg}(270^\circ - \alpha) = \text{ctg } \alpha$	$\text{tg}\left(\frac{3}{2}\pi - \alpha\right) = \text{ctg } \alpha$
$\text{ctg}(270^\circ - \alpha) = \text{tg } \alpha$	$\text{ctg}\left(\frac{3}{2}\pi - \alpha\right) = \text{tg } \alpha$

angoli opposti	
quarto quadrante	
$\text{sen}(-\alpha) = -\text{sen } \alpha$	$\text{sen}(-\alpha) = -\text{sen } \alpha$
$\text{cos}(-\alpha) = \text{cos } \alpha$	$\text{cos}(-\alpha) = \text{cos } \alpha$
$\text{tg}(-\alpha) = -\text{tg } \alpha$	$\text{tg}(-\alpha) = -\text{tg } \alpha$
$\text{ctg}(-\alpha) = -\text{ctg } \alpha$	$\text{ctg}(-\alpha) = -\text{ctg } \alpha$

angoli che differiscono di 270°	
quarto quadrante	
$\text{sen}(270^\circ + \alpha) = -\text{cos } \alpha$	$\text{sen}\left(\frac{3}{2}\pi + \alpha\right) = -\text{cos } \alpha$
$\text{cos}(270^\circ + \alpha) = \text{sen } \alpha$	$\text{cos}\left(\frac{3}{2}\pi + \alpha\right) = \text{sen } \alpha$
$\text{tg}(270^\circ + \alpha) = -\text{ctg } \alpha$	$\text{tg}\left(\frac{3}{2}\pi + \alpha\right) = -\text{ctg } \alpha$
$\text{ctg}(270^\circ + \alpha) = -\text{tg } \alpha$	$\text{ctg}\left(\frac{3}{2}\pi + \alpha\right) = -\text{tg } \alpha$

