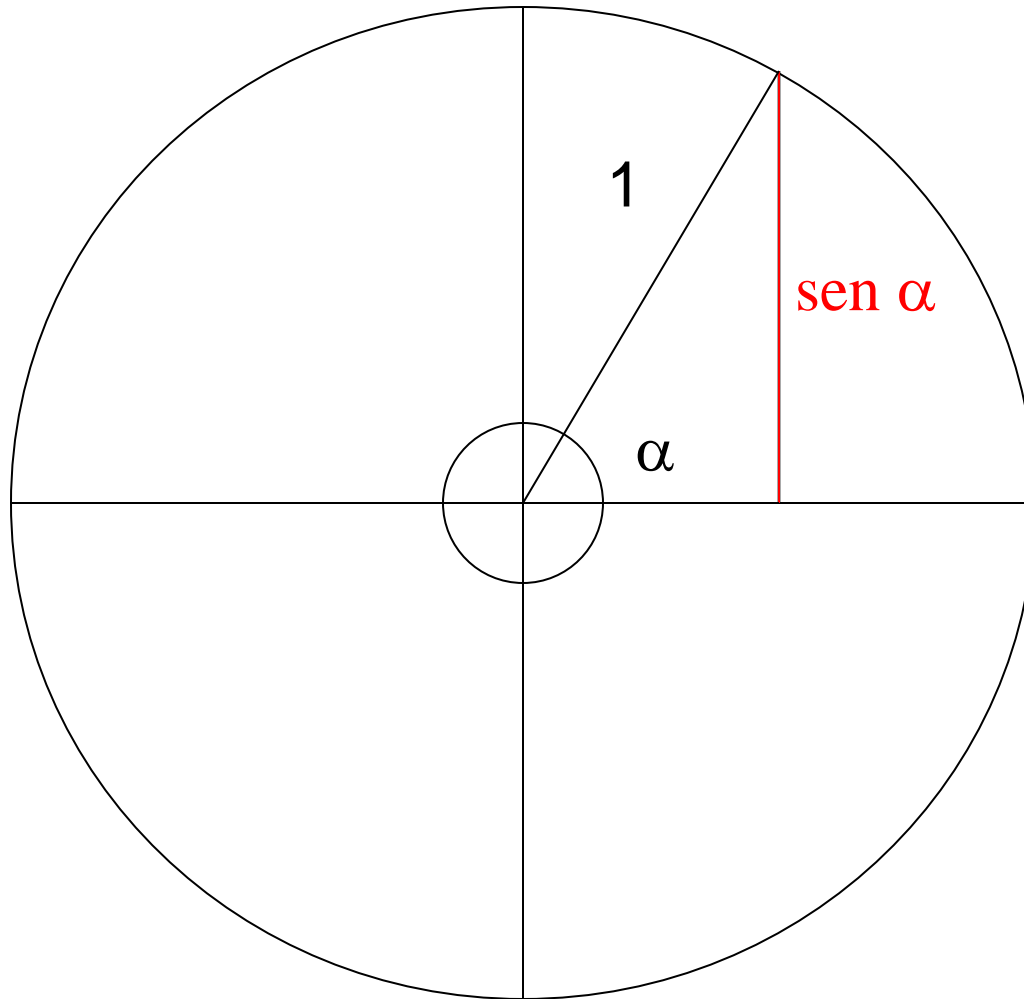


Funções trigonométricas inversas

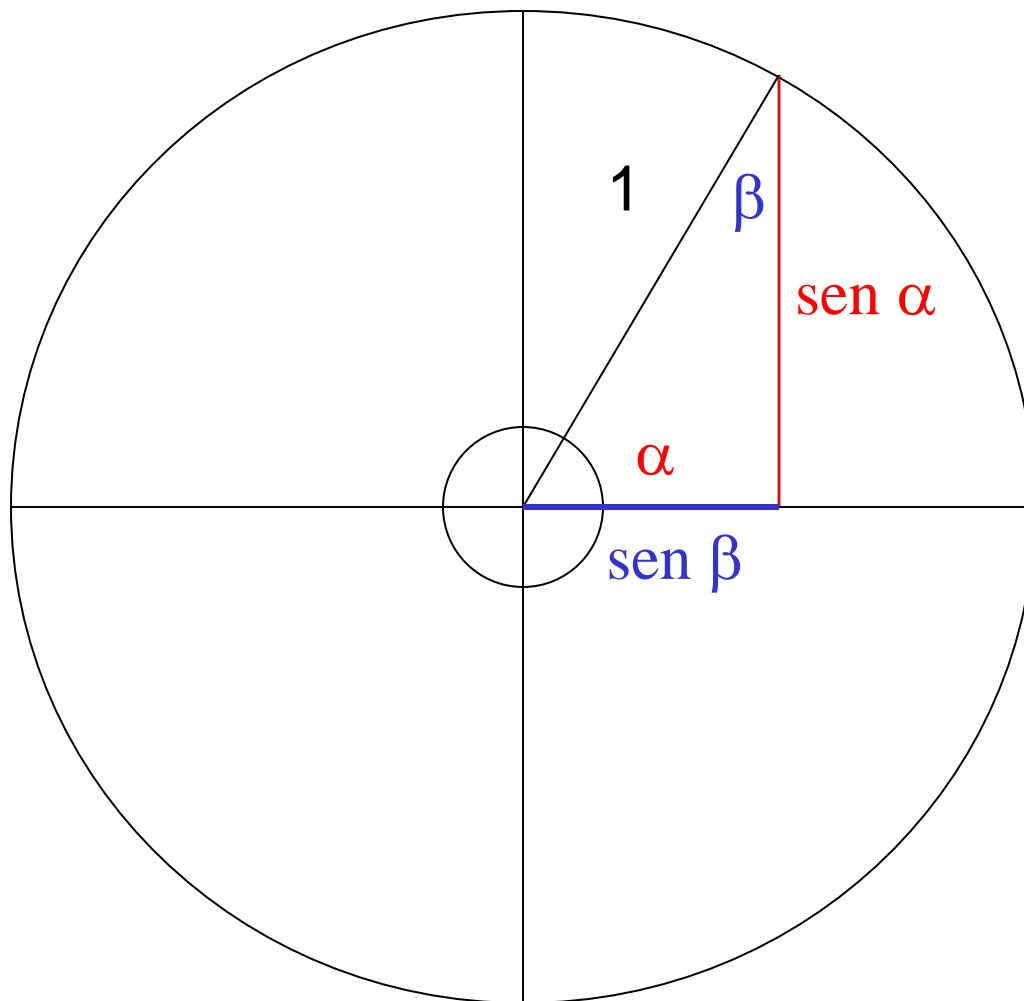
Antonio Carlos Brolezzi

brolezzi@ime.usp.br

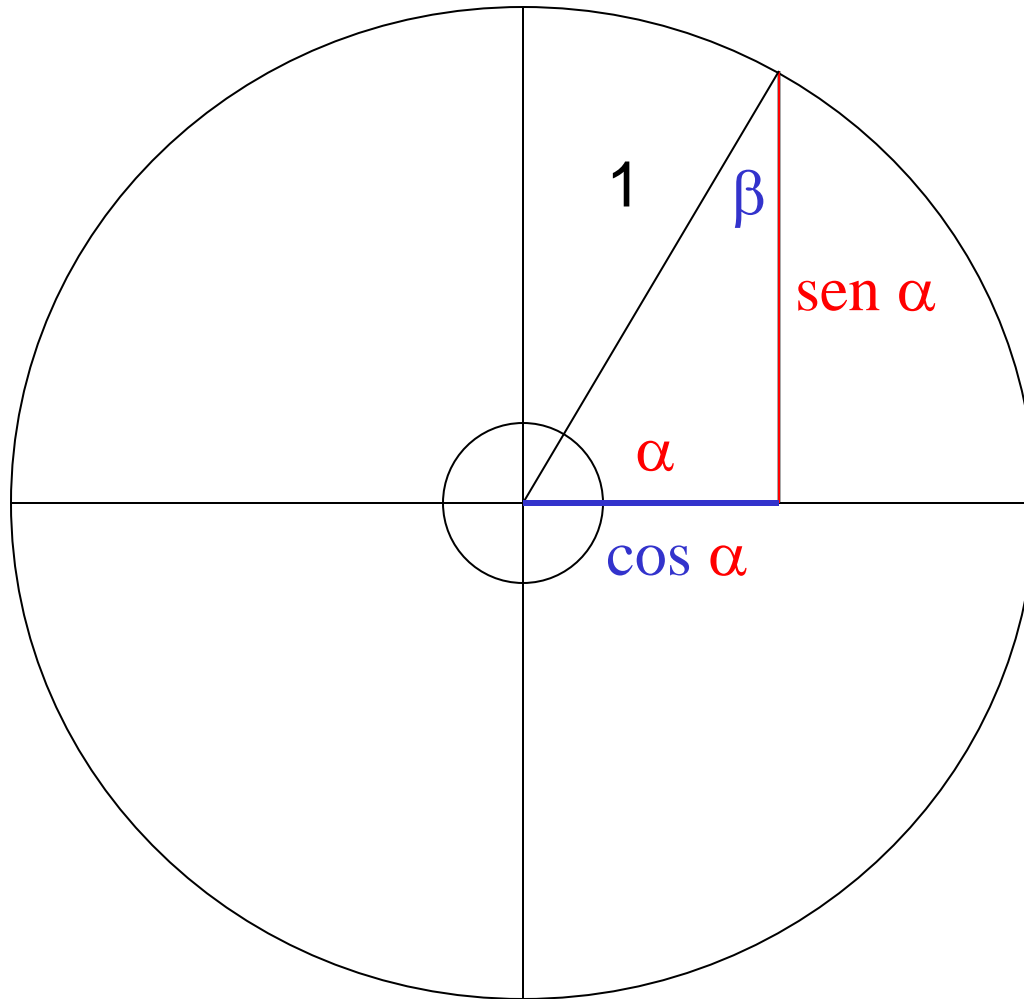
O seno de um ângulo alfa é a meia-corda relativa a esse ângulo, no círculo trigonométrico.

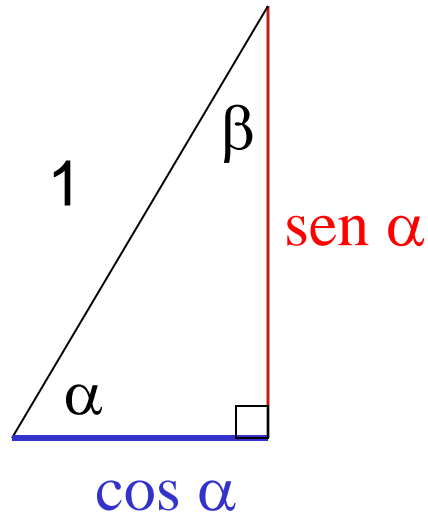
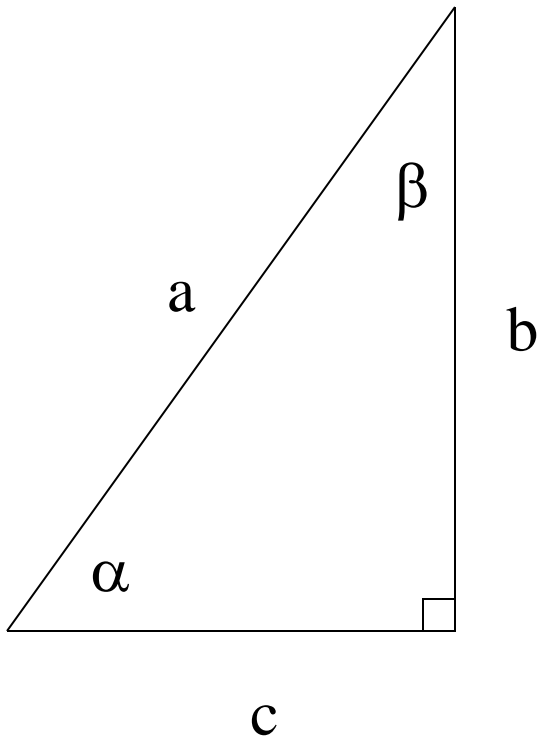


O cosseno é o seno do ângulo complementar.



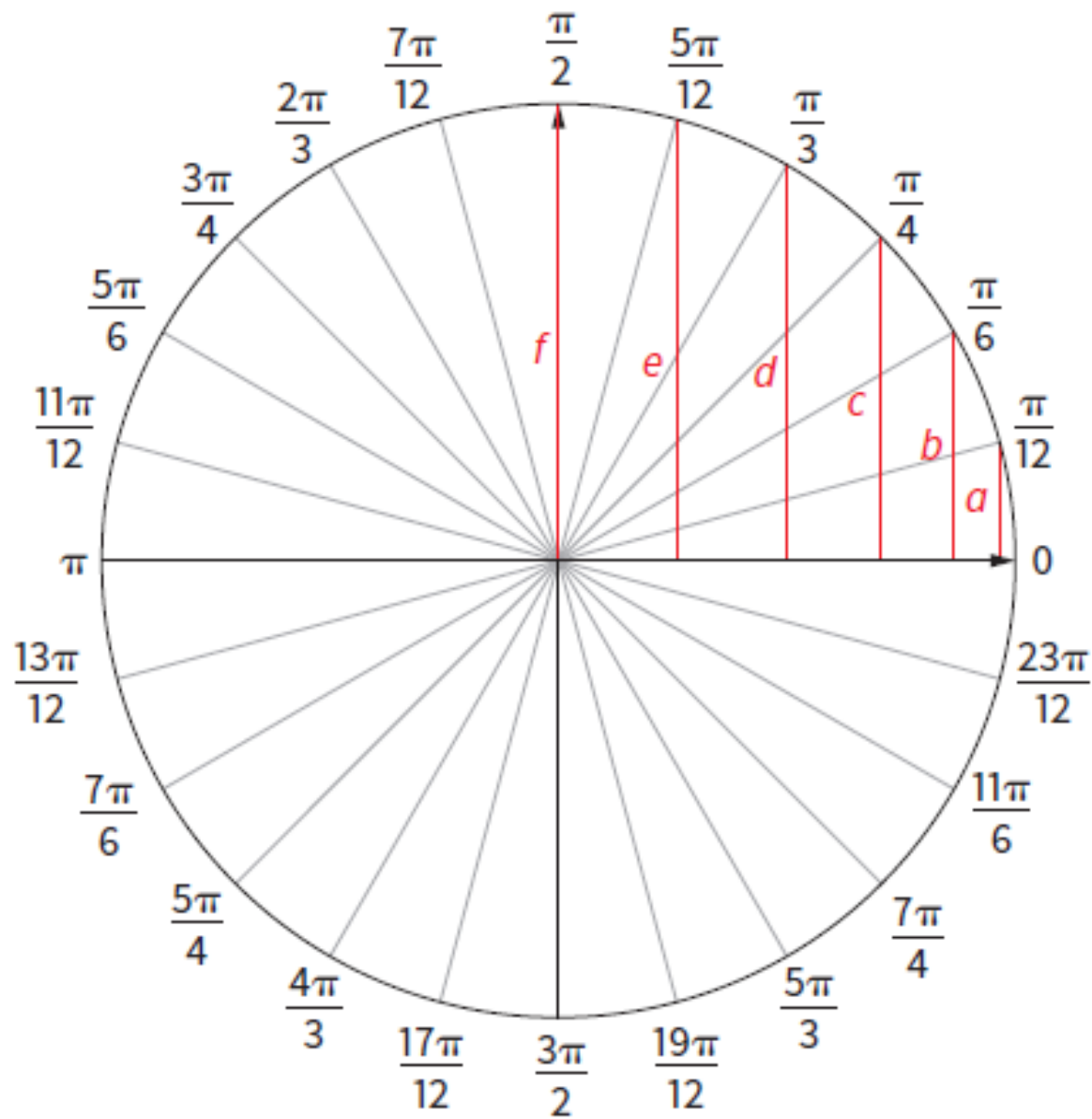
Complementi sinus = cosseno

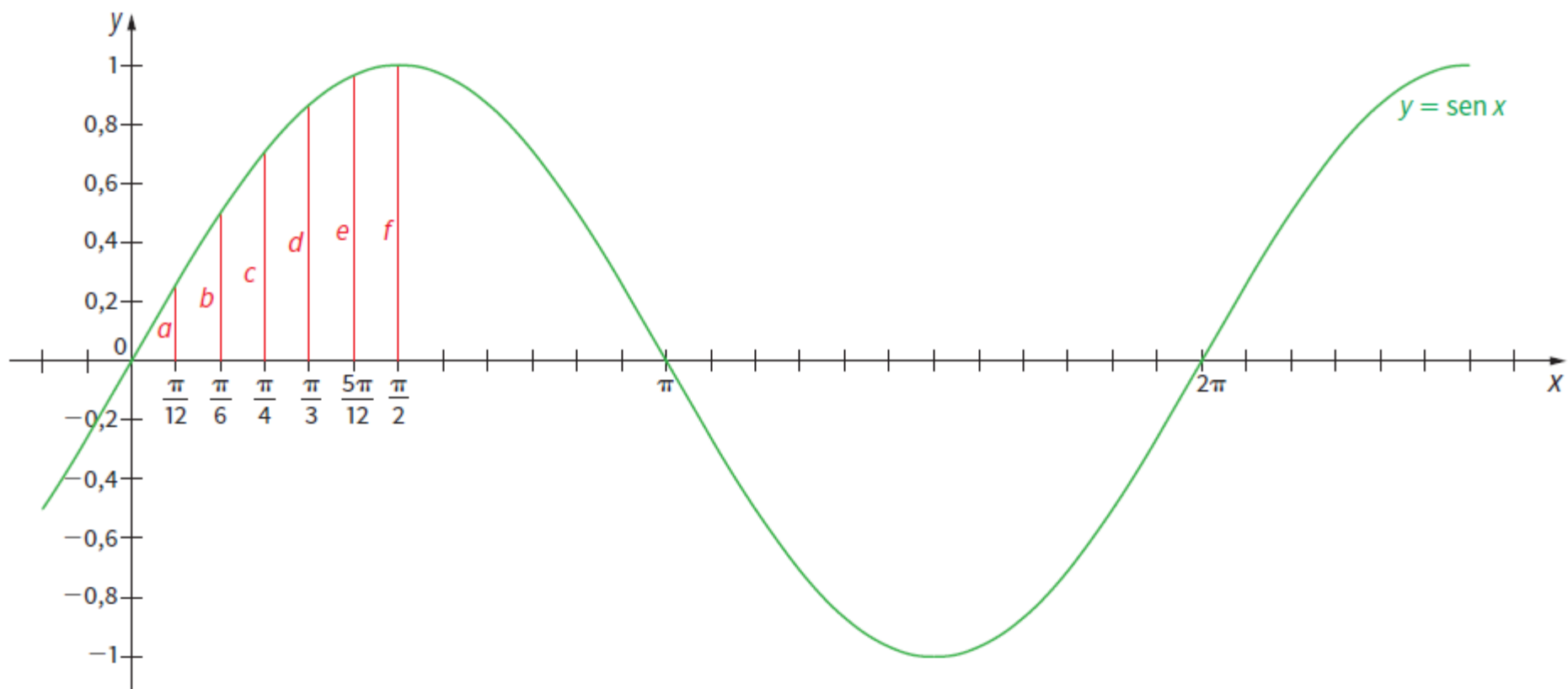


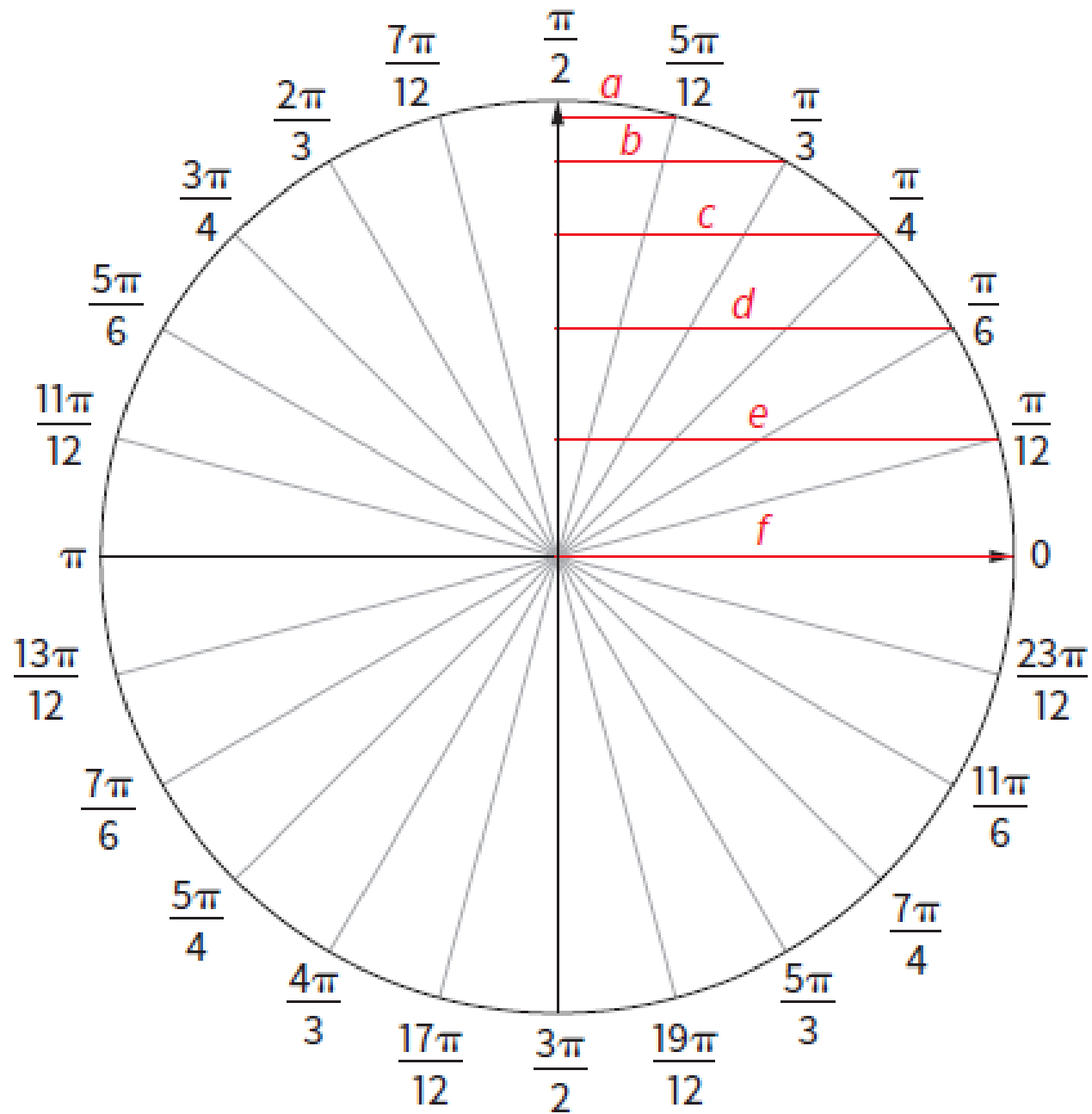


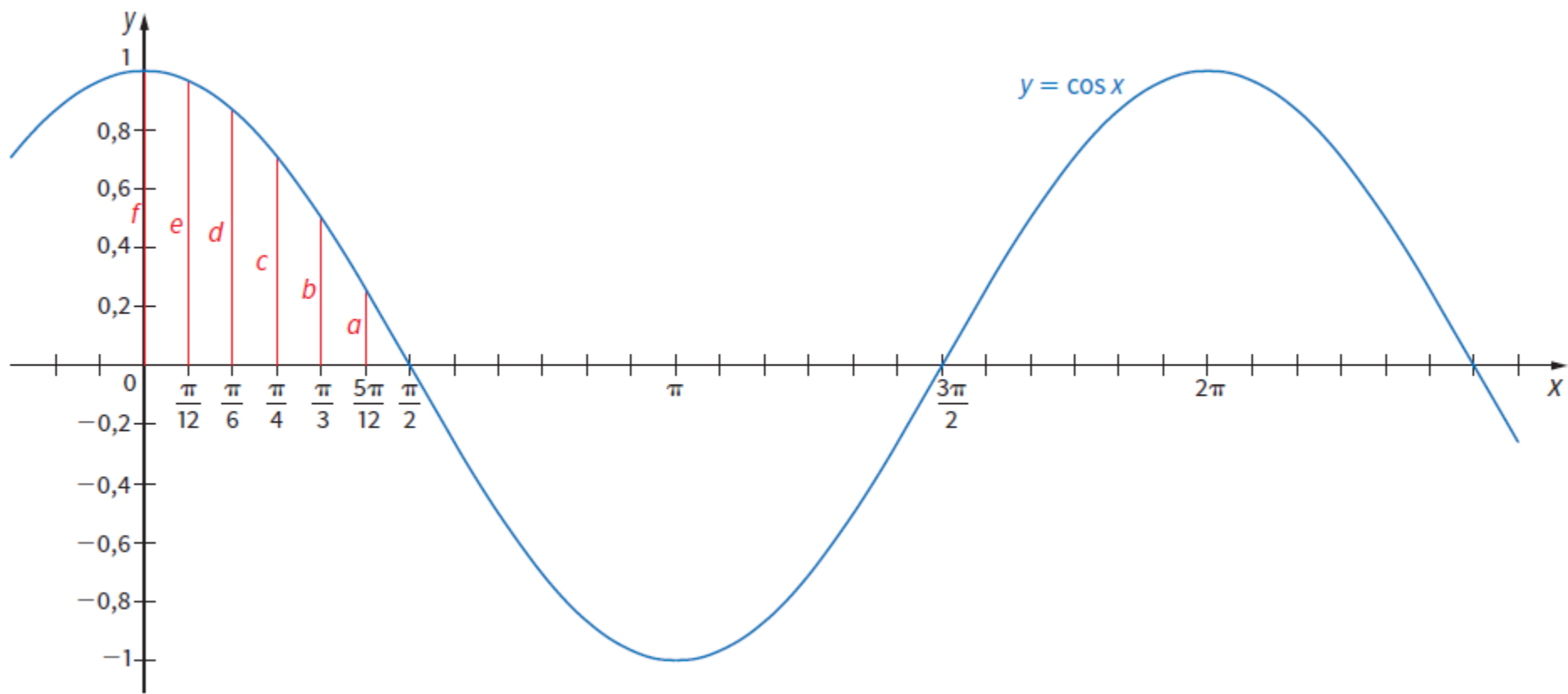
$$\text{sen } \alpha = b/a$$

$$\text{cos } \alpha = c/a$$

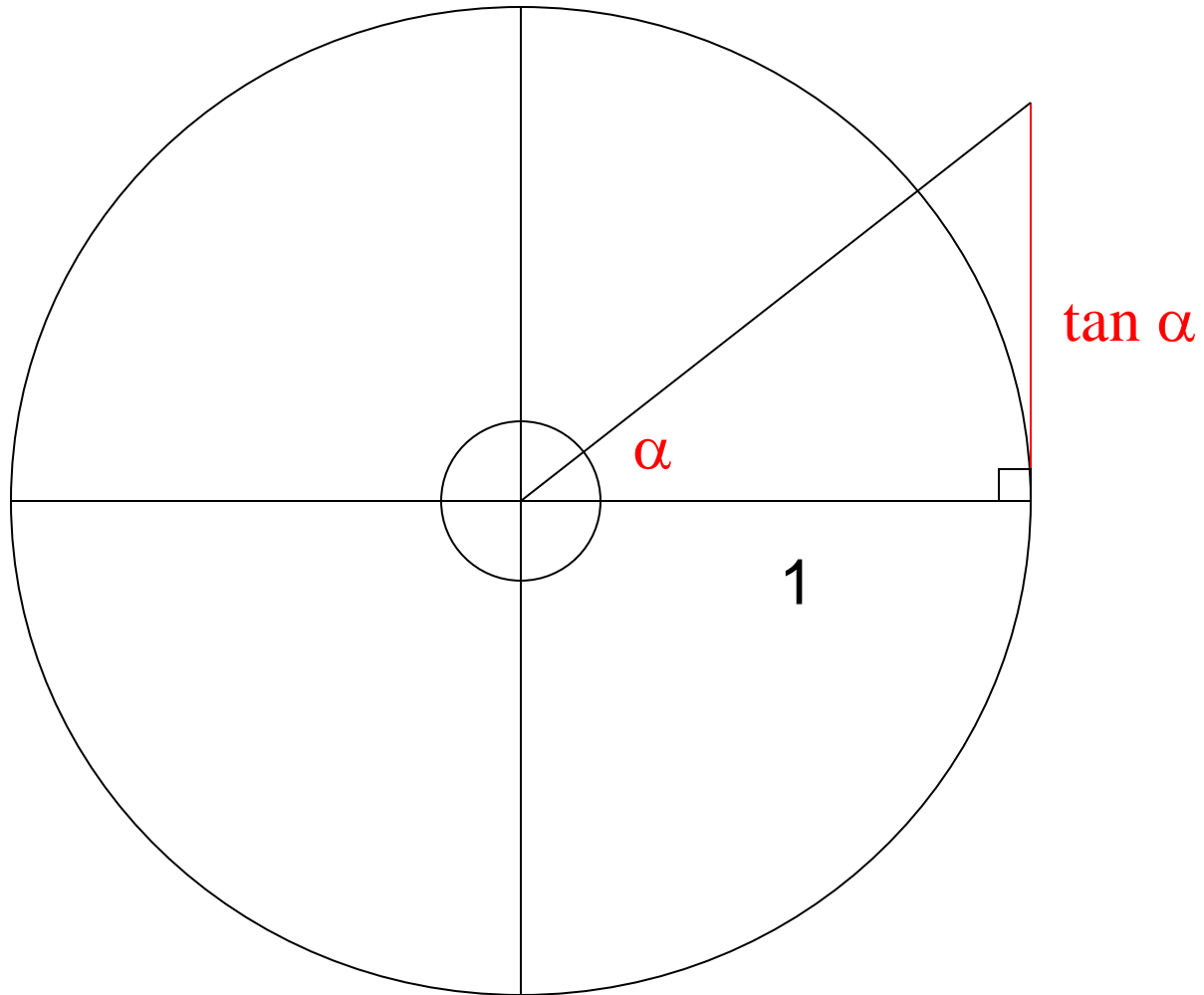




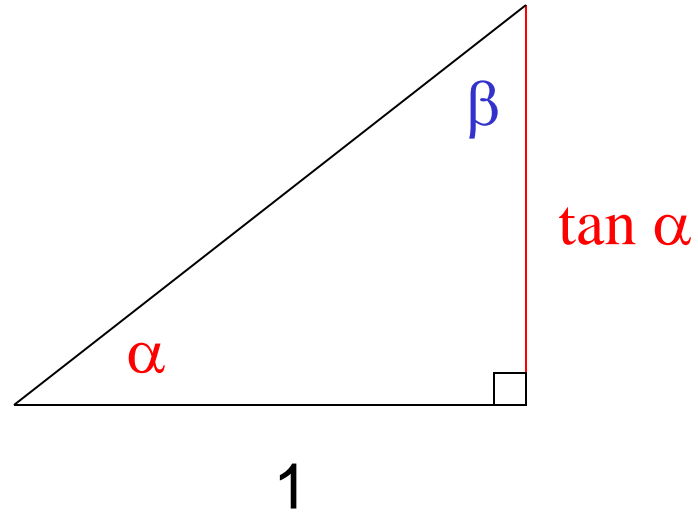
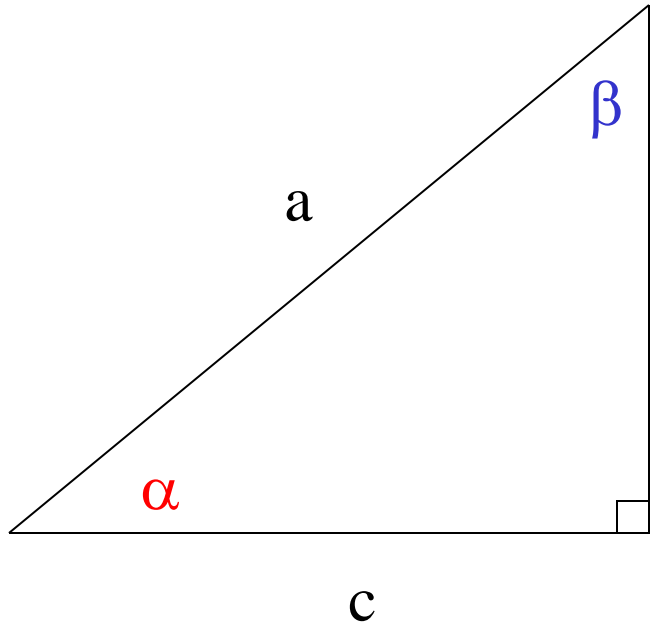




Tangente: que toca (*tange*)



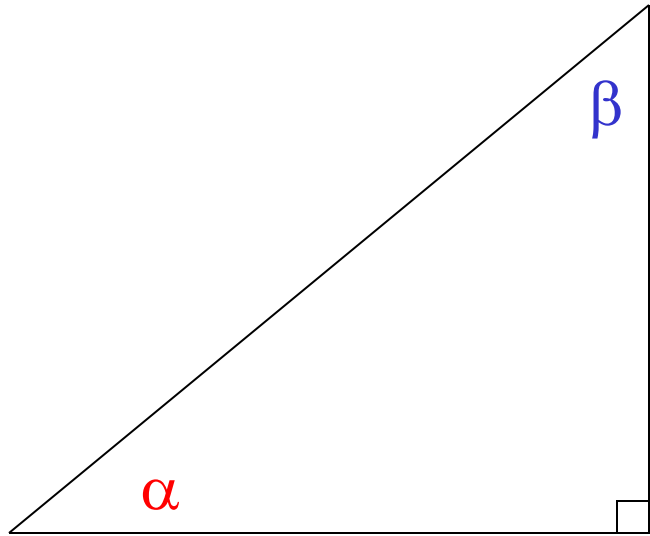
Cotangente: tangente do ângulo complementar



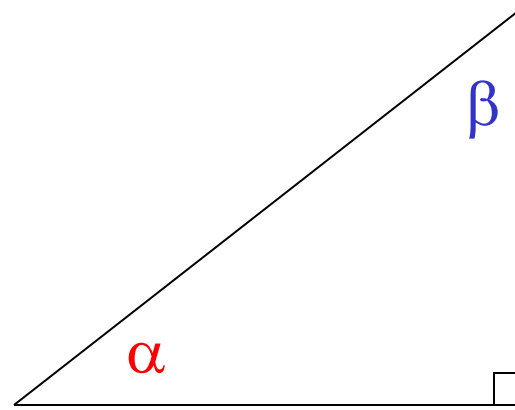
$$\tan \alpha = b/c$$

$$\tan \beta = \cotg \alpha = c/b$$

Cotangente: recíproca da tangente

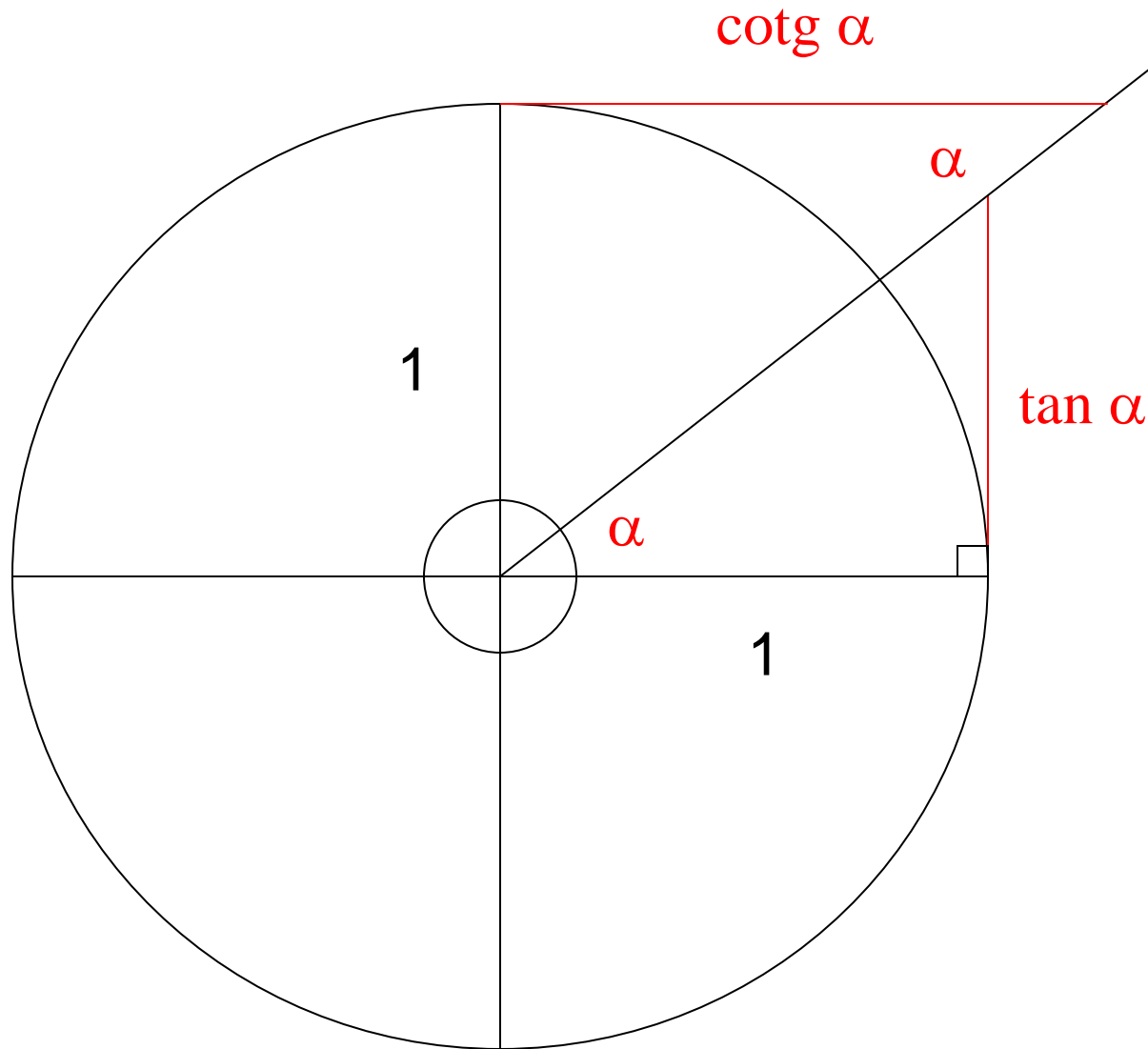


1

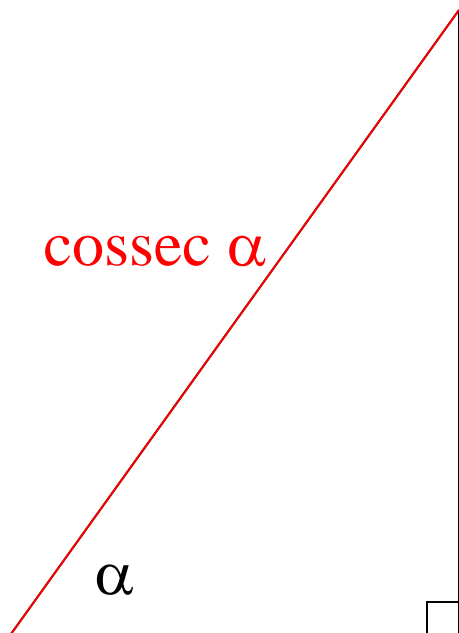


1

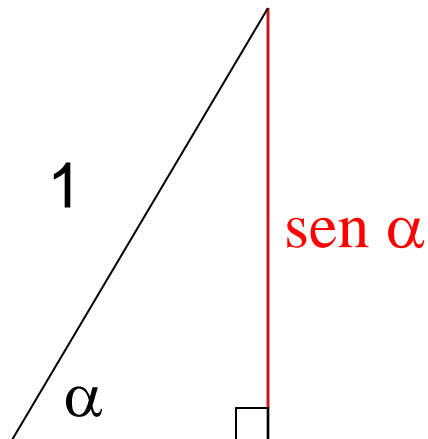
Cotangente: recíproca da tangente



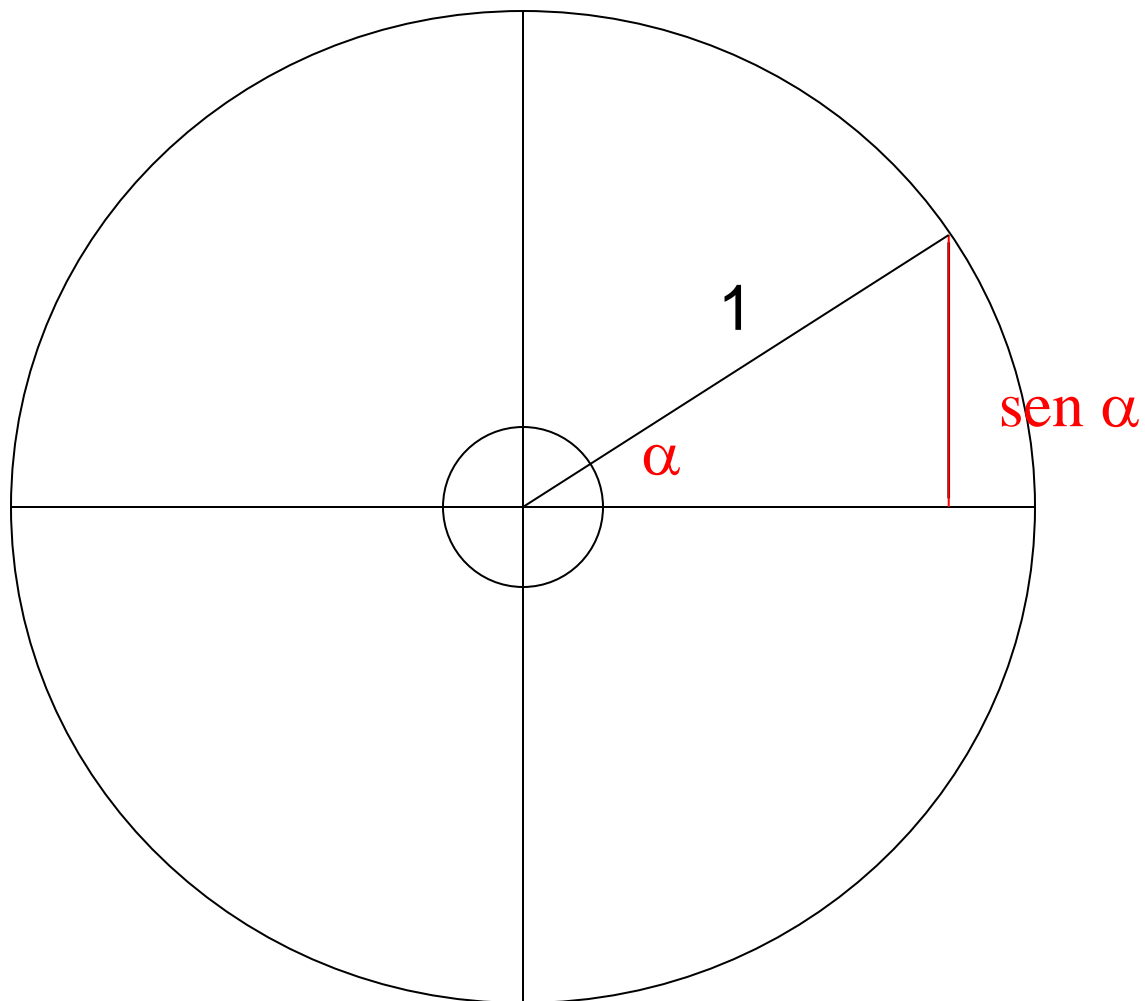
Cossecante: recíproca do seno



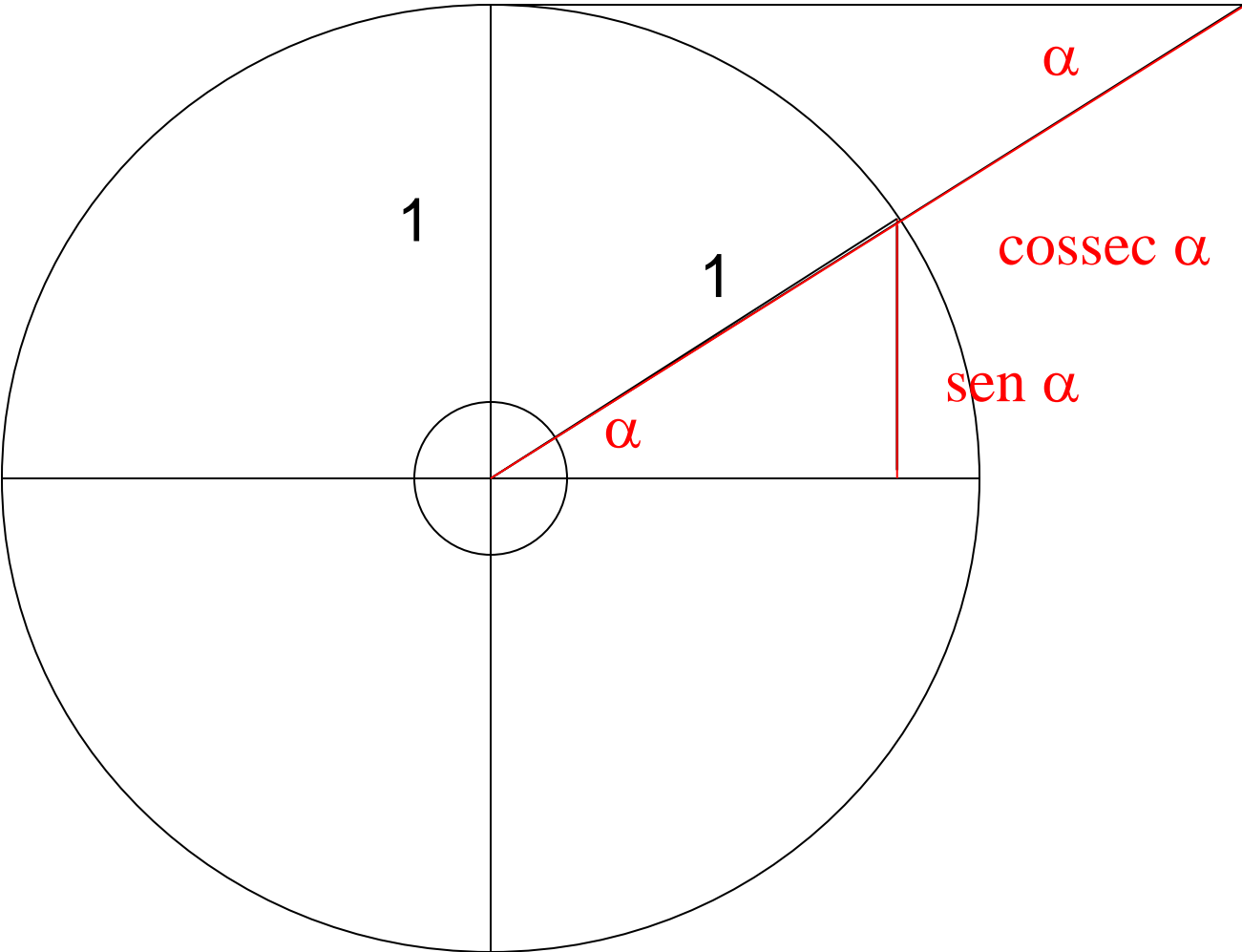
1



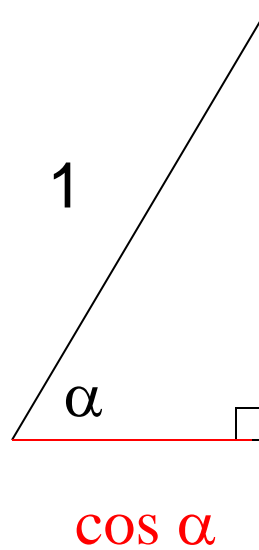
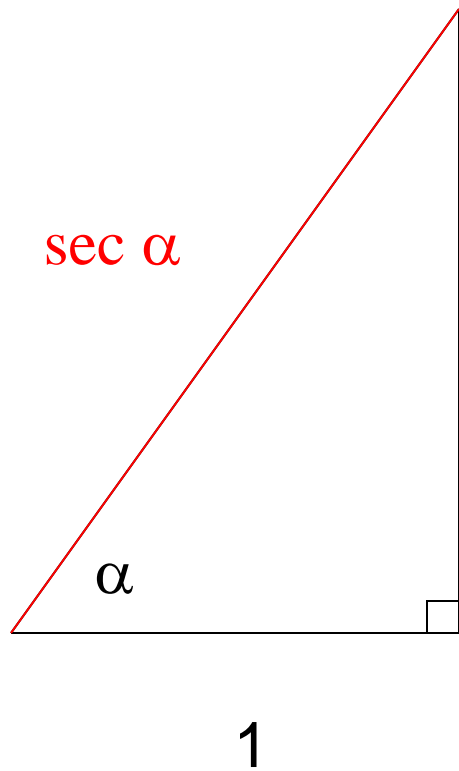
Cossecante: recíproca do seno



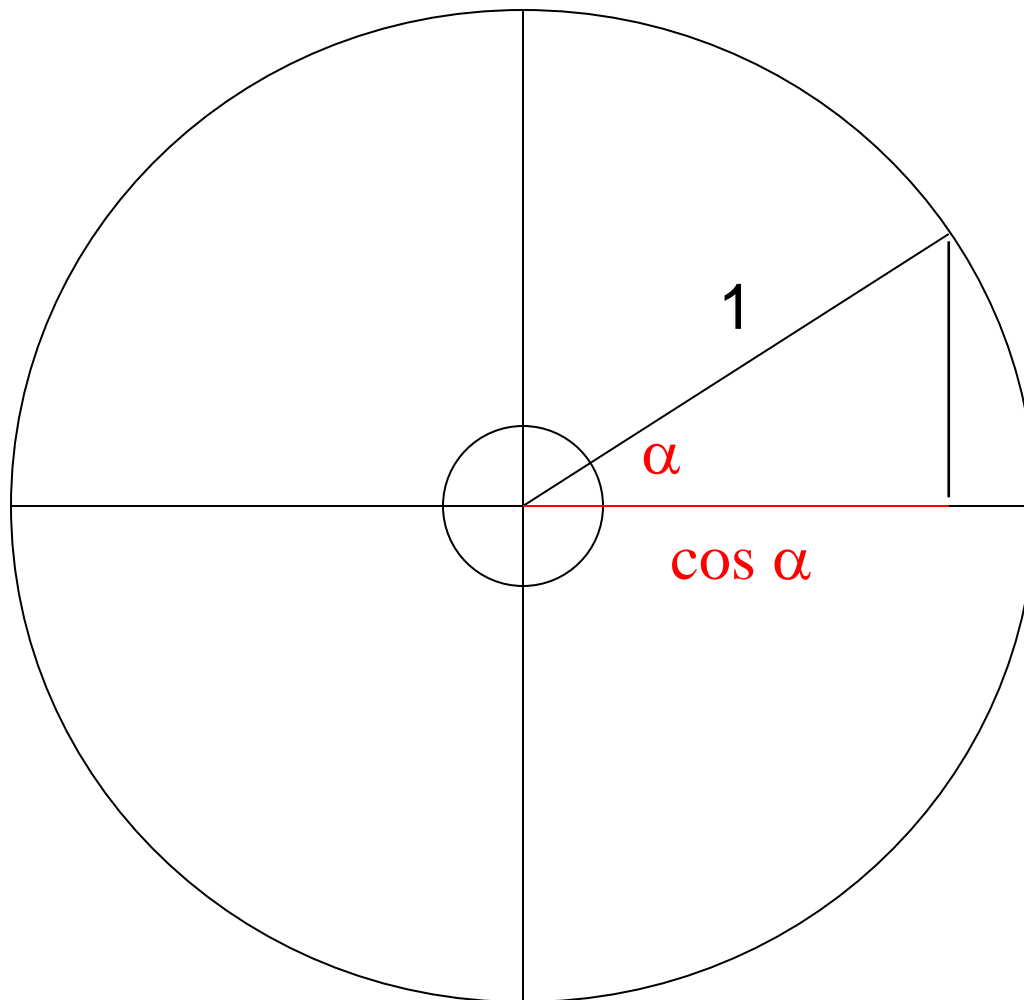
Cossecante: recíproca do seno



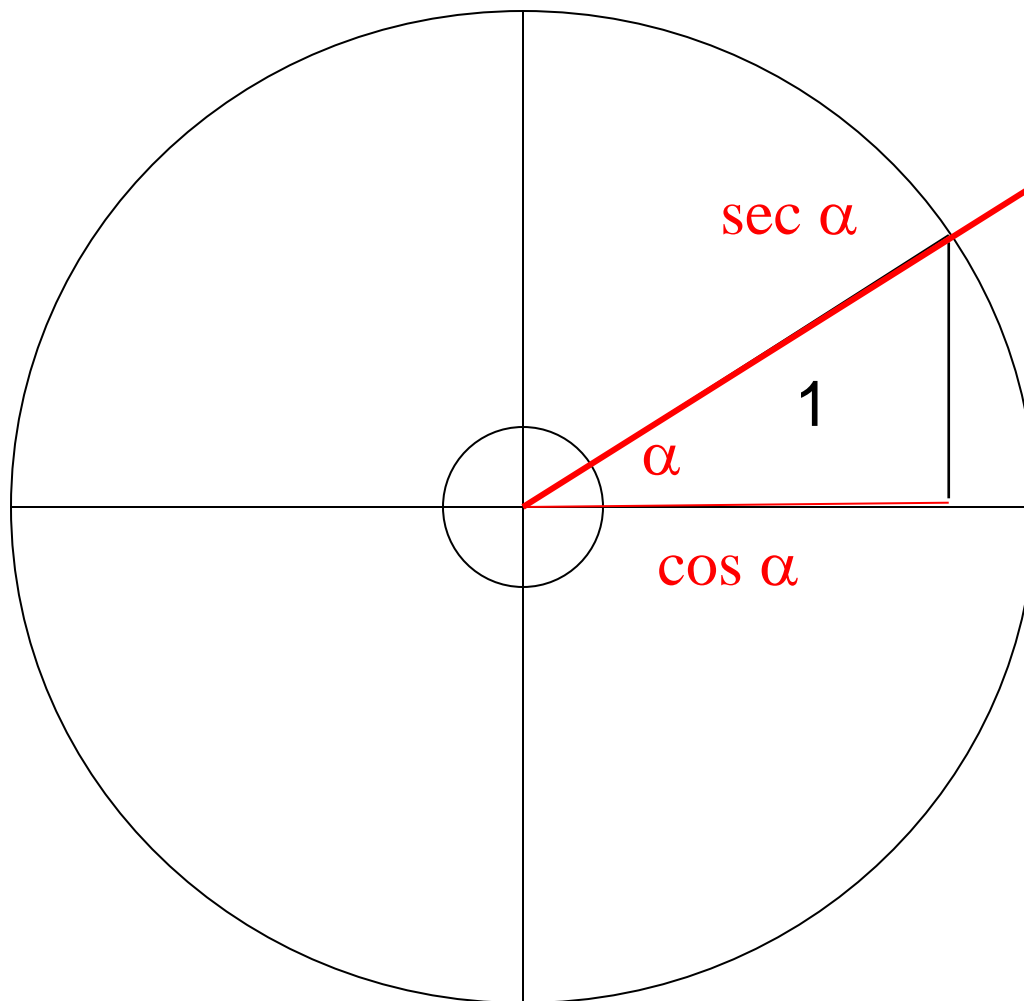
Secante: recíproca do cosseno

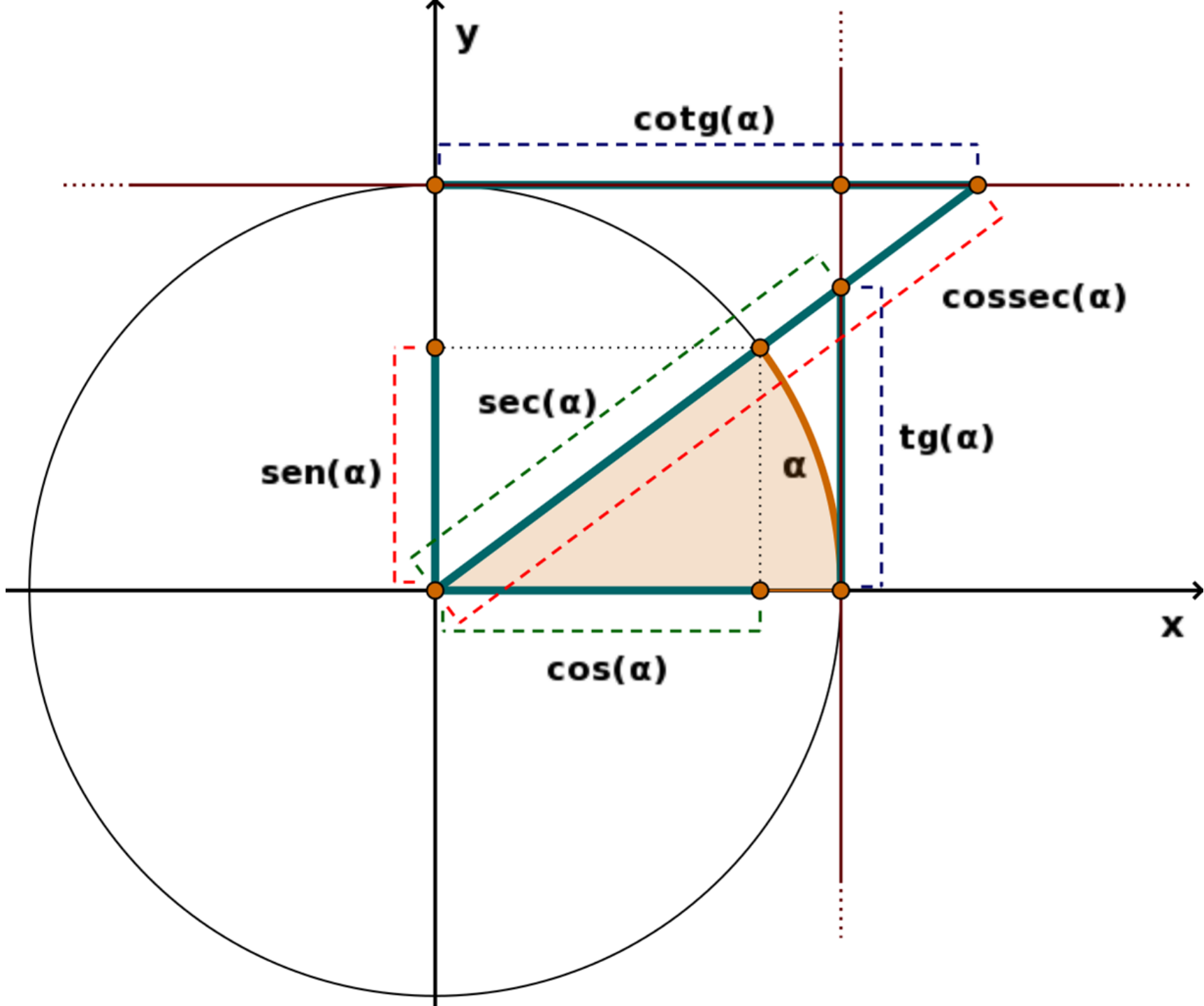


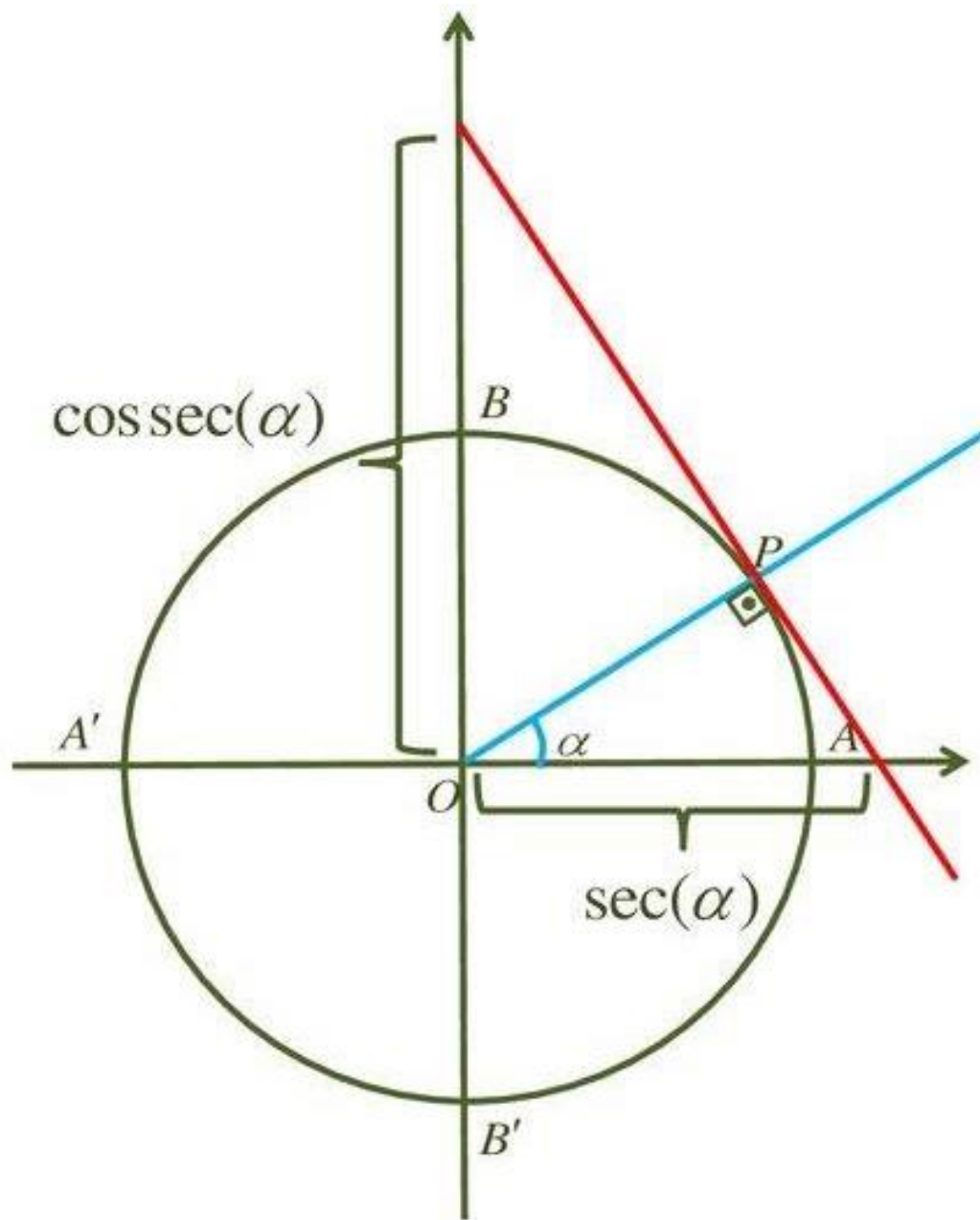
Secante: recíproca do cosseno



Secante: recíproca do cosseno





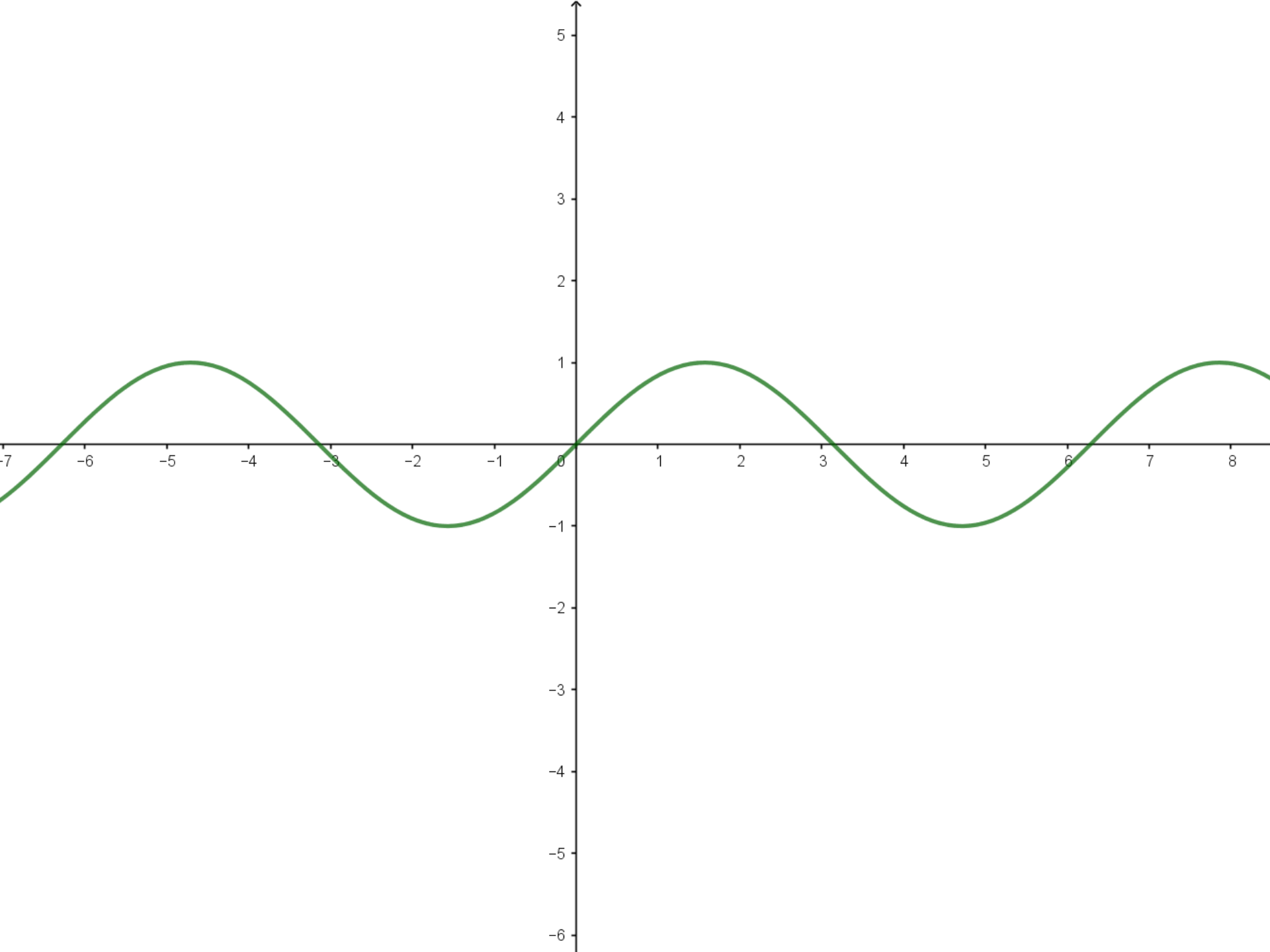


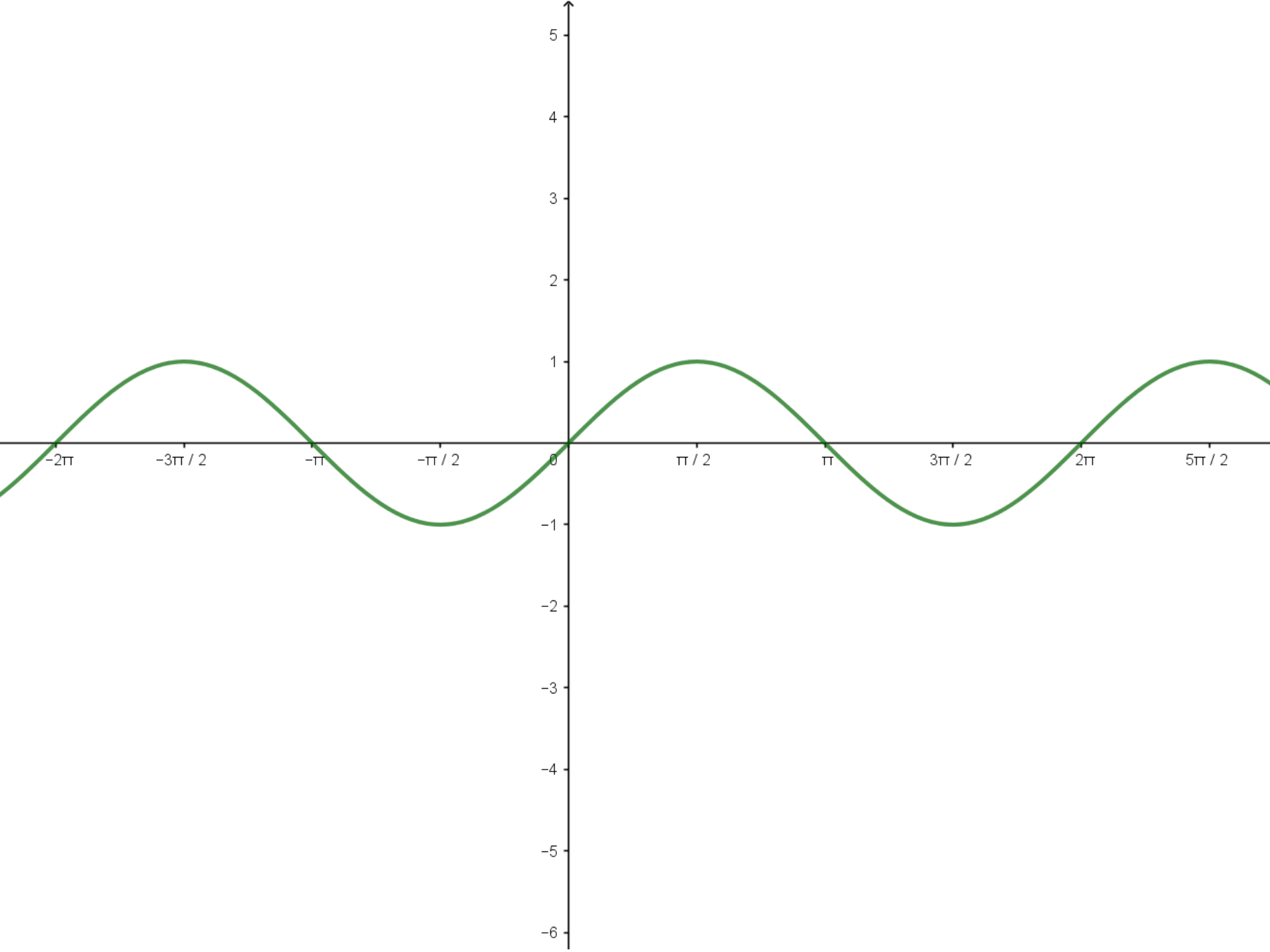
Funções inversas de funções trigonométricas (pelo Geogebra)

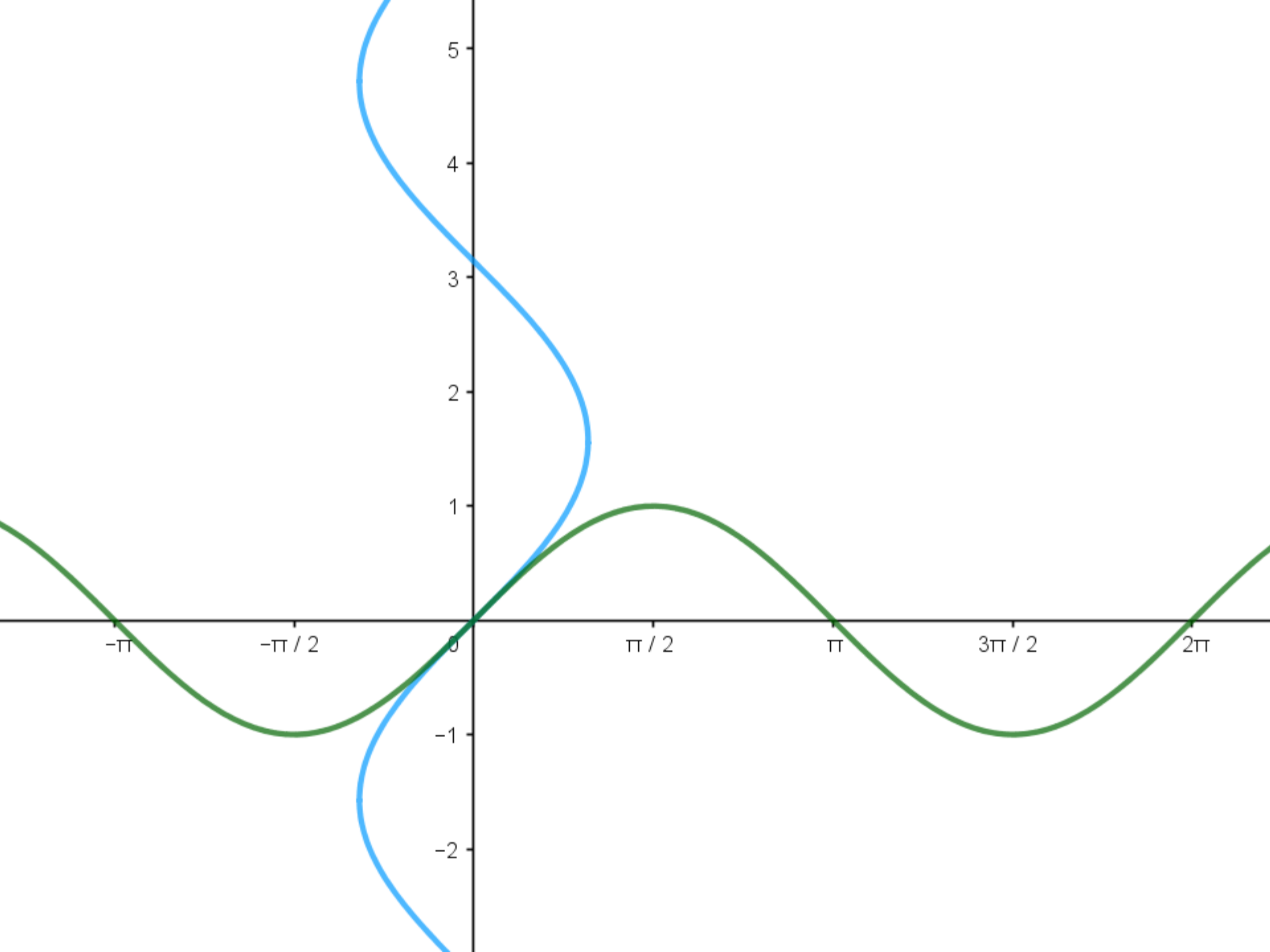
Arco seno

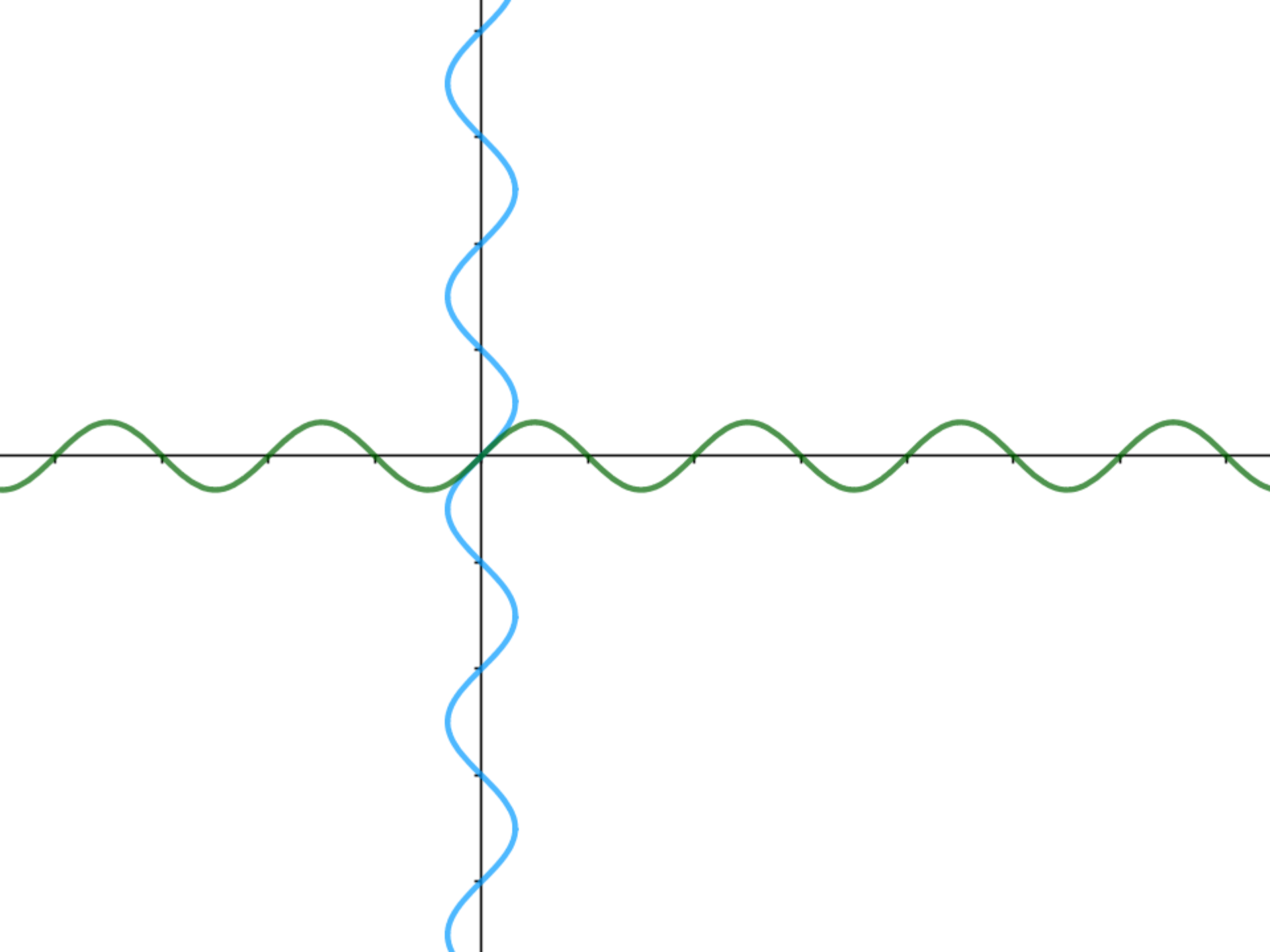
Arco cosseno

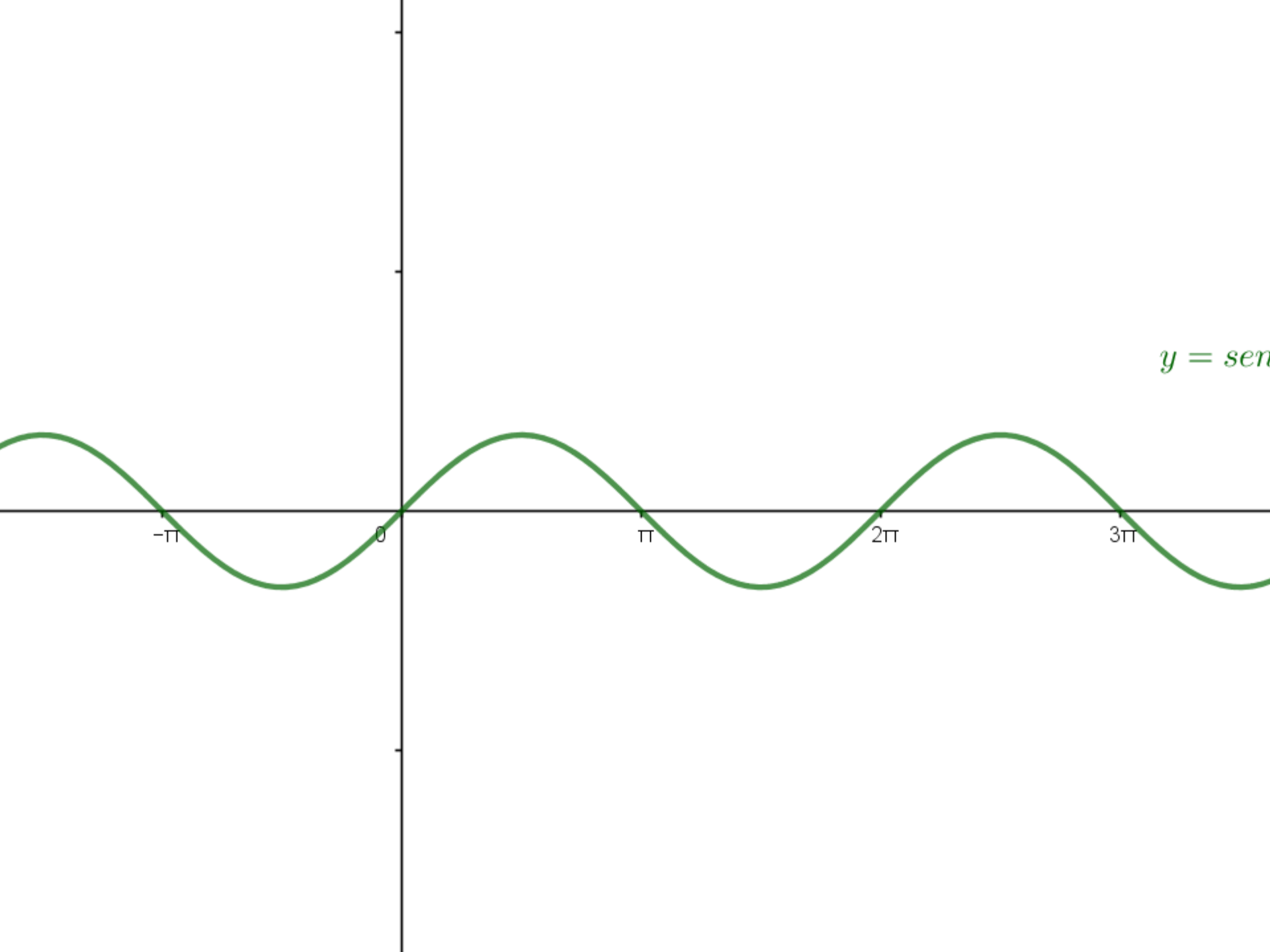
Arco tangente







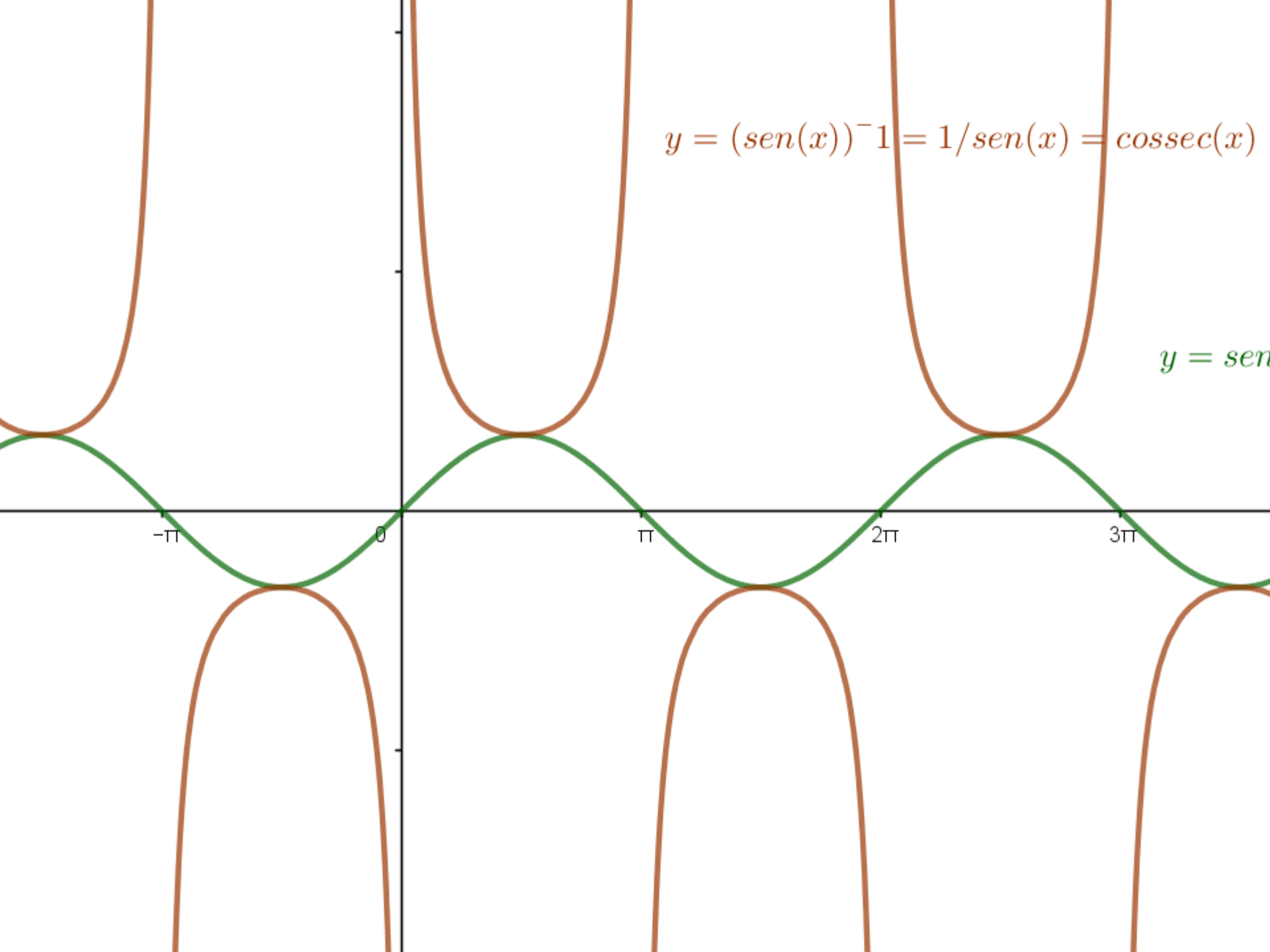


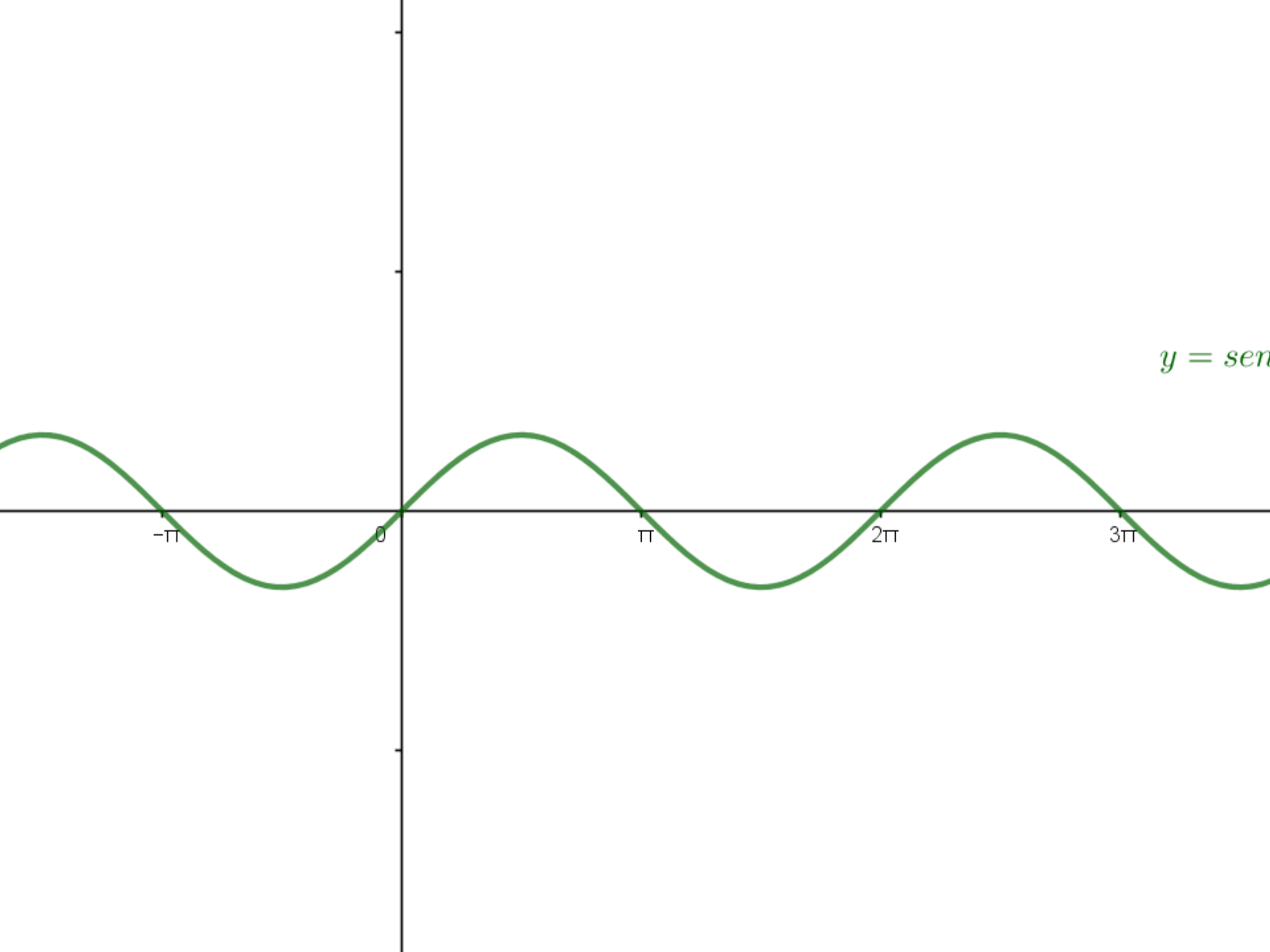


$y = \text{sen}(x)$

$$y = (\text{sen}(x))^{-1} = 1/\text{sen}(x) = \text{cossec}(x)$$

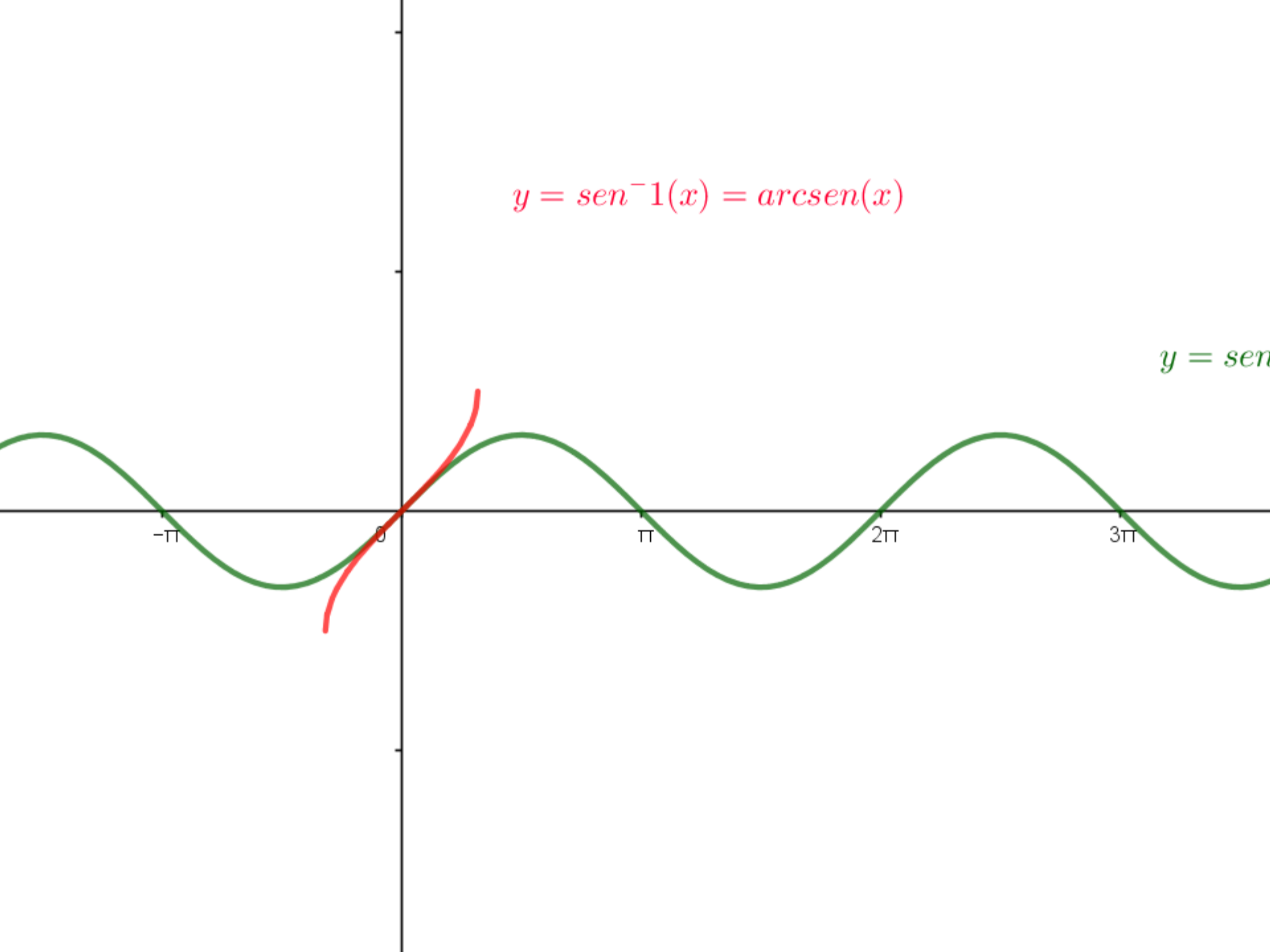
$$y = \text{sen}(x)$$

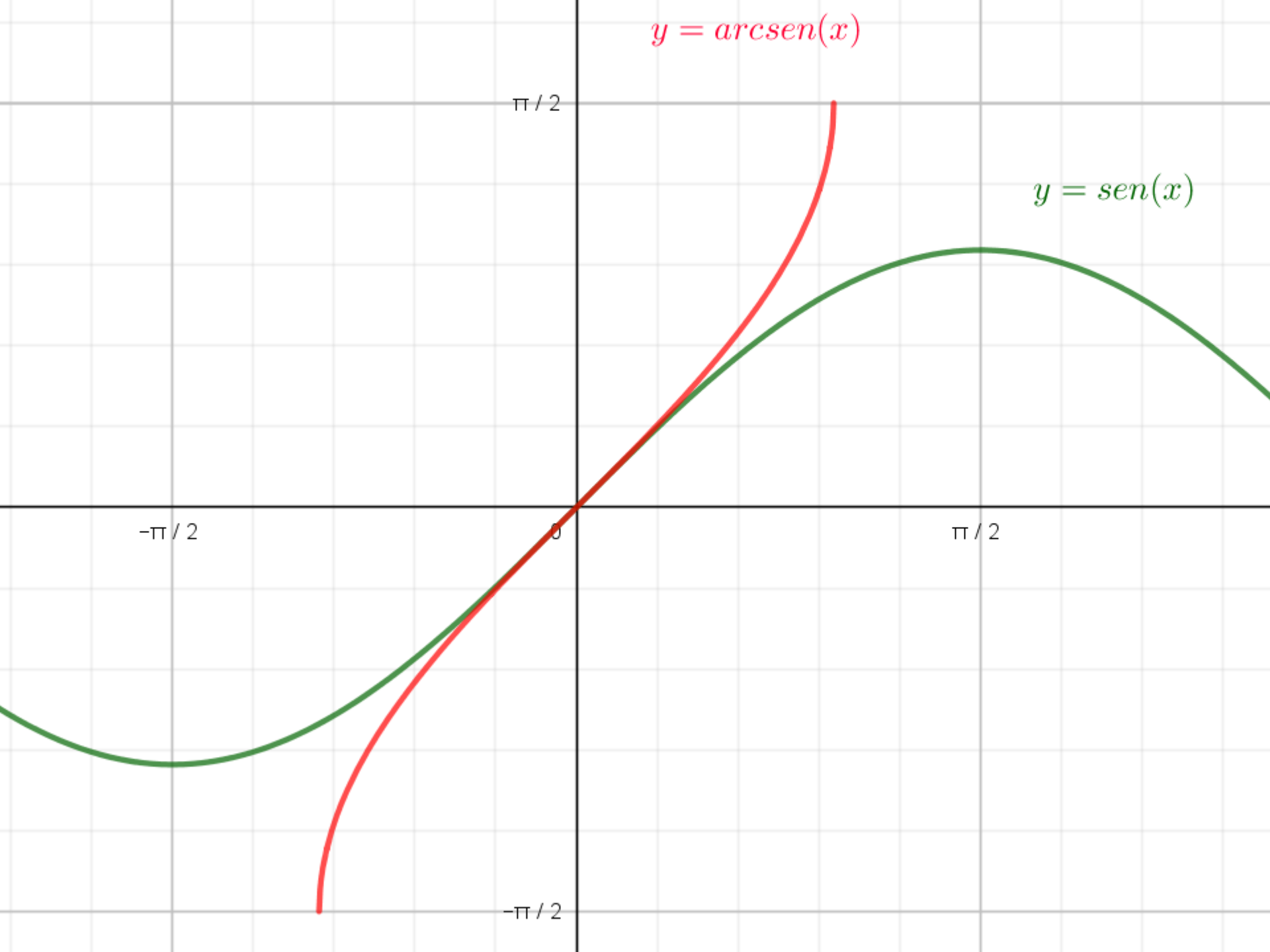




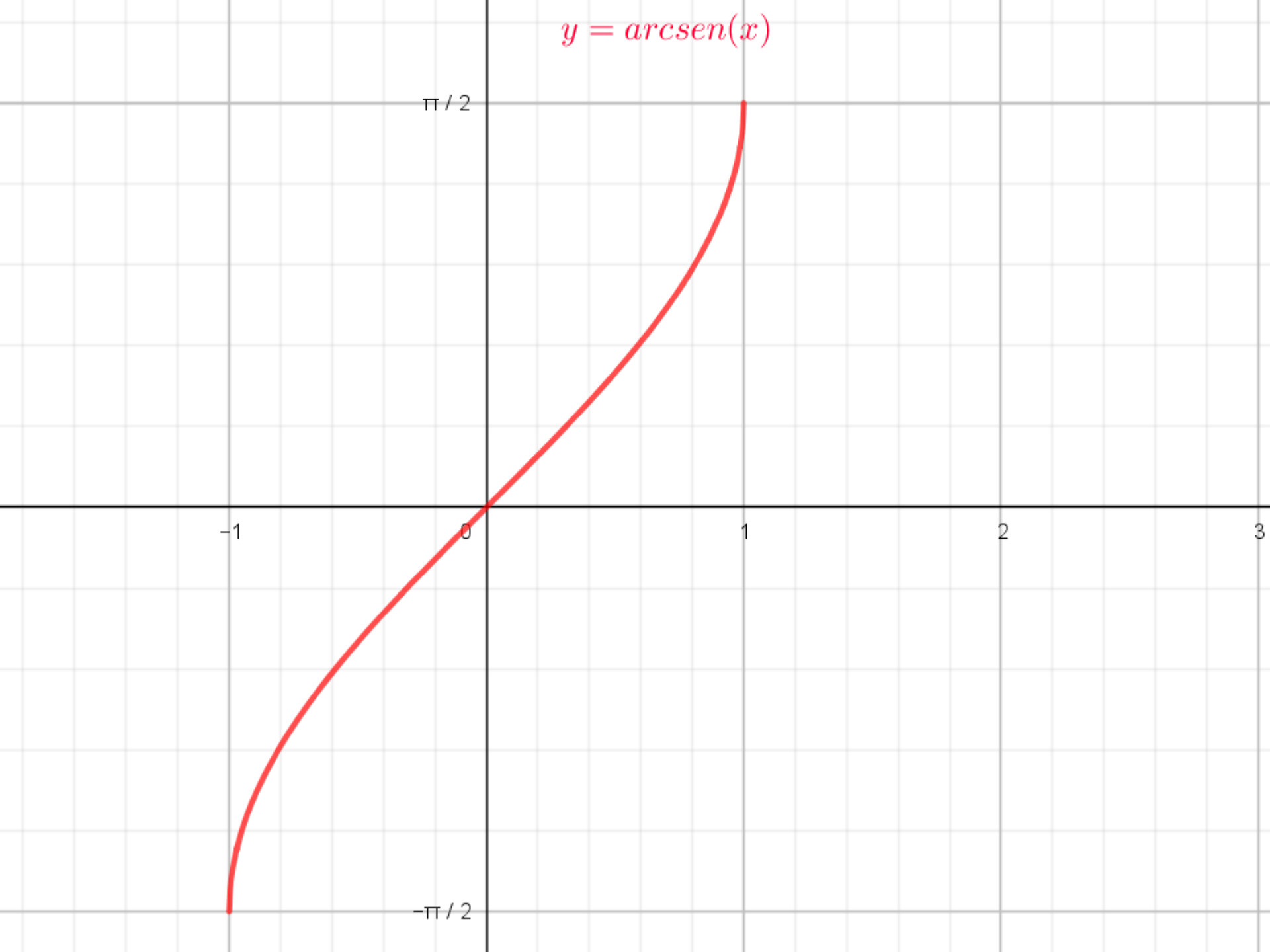
$$y = \text{sen}^{-1}(x) = \text{arcsen}(x)$$

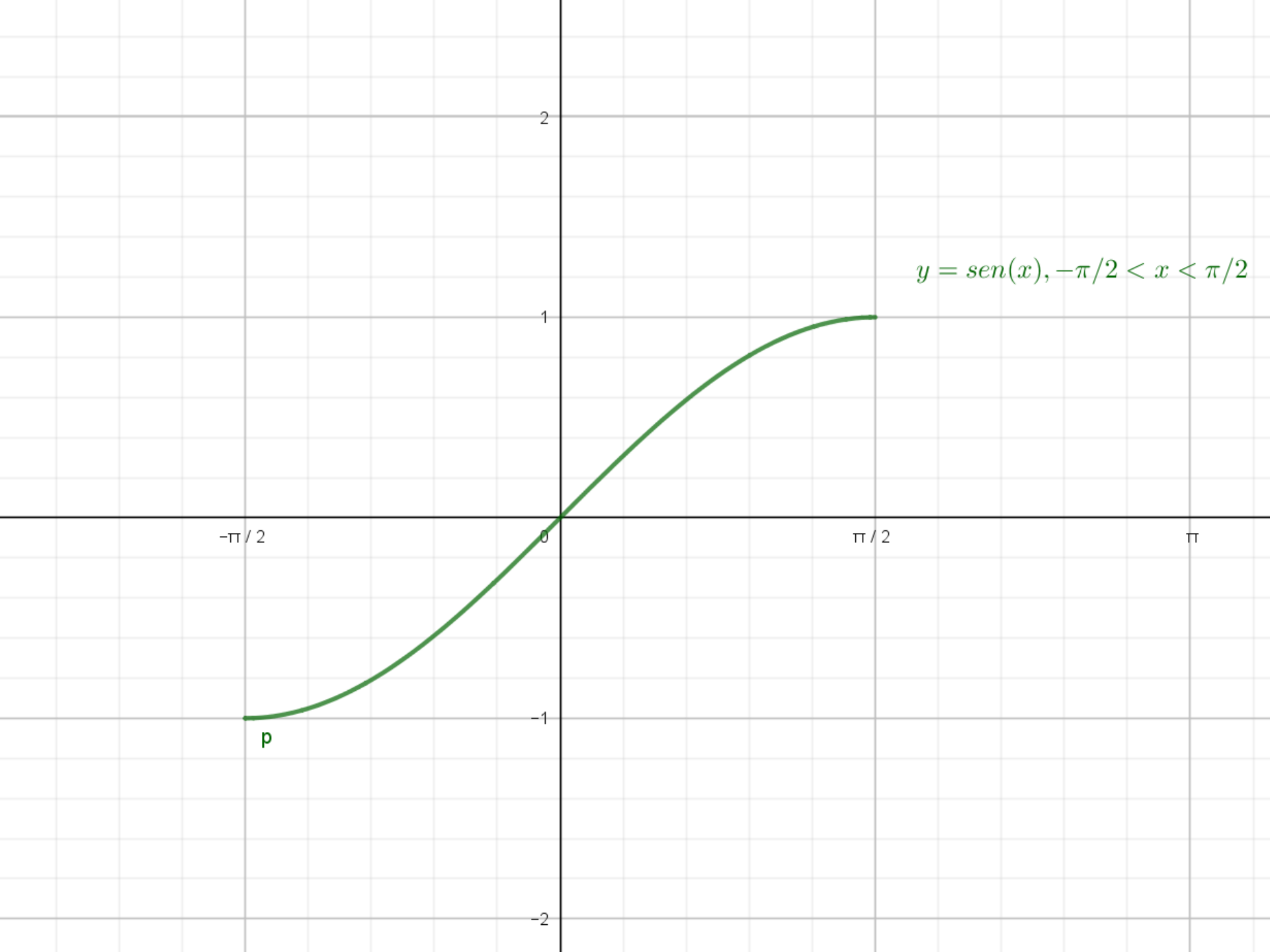
$$y = \text{sen}$$





$$y = \arcsin(x)$$





$$y = \text{sen}(x), -\pi/2 < x < \pi/2$$

$-\pi/2$

0

$\pi/2$

π

-1

-2

ρ

