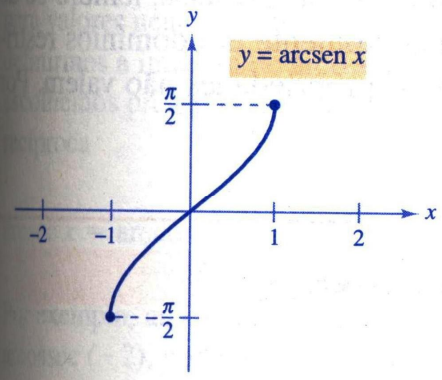
Definições das Funções Trigonométricas Inversas

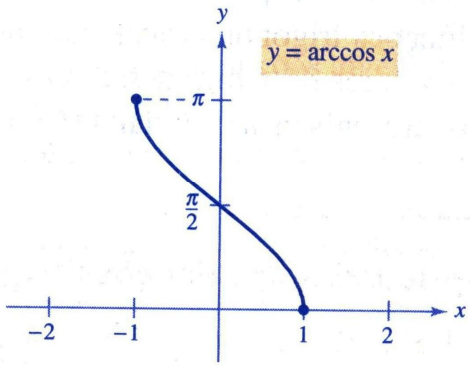
Função	*Domínio*	*Imagem*
$y = \text{arcsen } x \Leftrightarrow \text{sen } y = x$	$-1 \leq x \leq 1$	$-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$
$y = \arccos x \Leftrightarrow \cos y = x$	$-1 \leq x \leq 1$	$0 \leq y \leq \pi$

Definições das Funções Trigonométricas Inversas (Continuação)

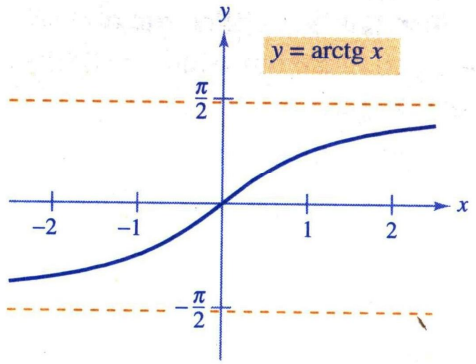
Função	*Domínio*	*Imagem*
$y = \text{arctg } x \Leftrightarrow \text{tg } y = x$	$-\infty < x < \infty$	$-\frac{\pi}{2} < y < \frac{\pi}{2}$
$y = \text{arccotg } x \Leftrightarrow \text{cotg } y = x$	$-\infty < x < \infty$	$0 < y < \pi$
$y = \text{arcsec } x \Leftrightarrow \sec y = x$	$\lvert x \rvert \geq 1$	$0 \leq y \leq \pi, \quad y \neq \frac{\pi}{2}$
$y = \text{arccossec } x \Leftrightarrow \text{cossec } y = x$	$\lvert x \rvert \geq 1$	$-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}, \quad y \neq 0$



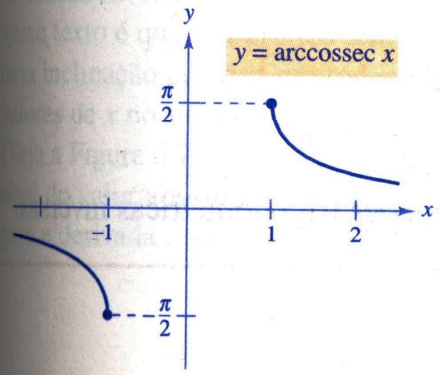
Domínio: $[-1, 1]$
Imagem: $[-\pi/2, \pi/2]$



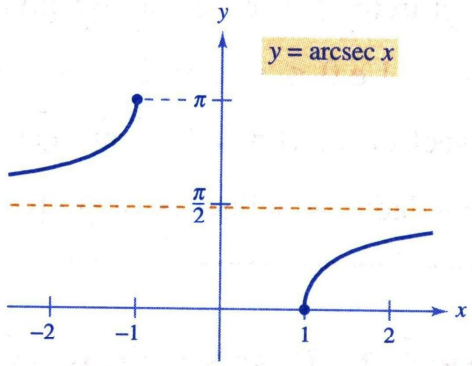
Domínio : $[-1, 1]$
Imagem : $[0, \pi]$



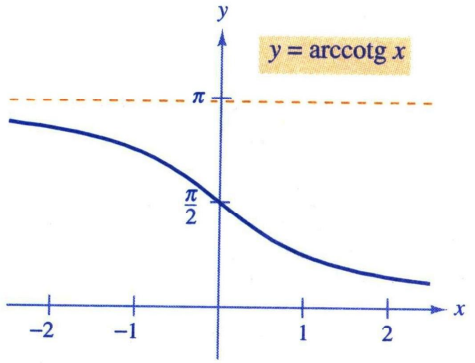
Domínio : $(-\infty, \infty)$
Imagem : $(-\pi/2, \pi/2)$



Domínio : $(-\infty, -1] \cup [1, \infty)$
Imagem : $[-\pi/2, 0) \cup (0, \pi/2]$



Domínio : $(-\infty, -1] \cup [1, \infty)$
Imagem : $[0, \pi/2) \cup (\pi/2, \pi]$



Domínio : $(-\infty, \infty)$
Imagem : $(0, \pi)$

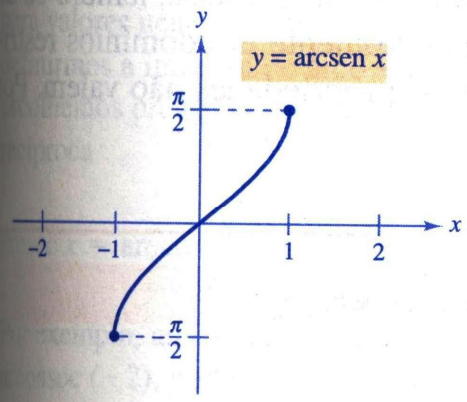
Figura 5.29

Definições das Funções Trigonométricas Inversas

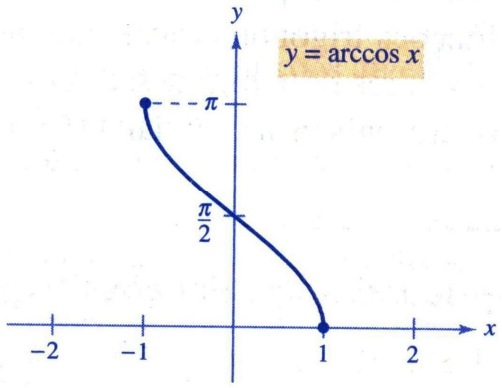
Função	*Domínio*	*Imagem*
$y = \text{arcsen } x \Leftrightarrow \text{sen } y = x$	$-1 \leq x \leq 1$	$-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}$
$y = \arccos x \Leftrightarrow \cos y = x$	$-1 \leq x \leq 1$	$0 \leq y \leq \pi$

Definições das Funções Trigonométricas Inversas (Continuação)

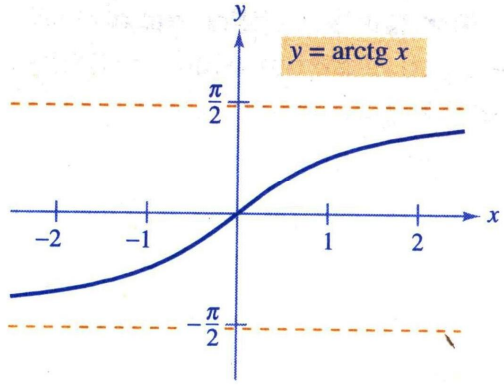
Função	*Domínio*	*Imagem*
$y = \text{arctg } x \Leftrightarrow \text{tg } y = x$	$-\infty < x < \infty$	$-\frac{\pi}{2} < y < \frac{\pi}{2}$
$y = \text{arccotg } x \Leftrightarrow \text{cotg } y = x$	$-\infty < x < \infty$	$0 < y < \pi$
$y = \text{arcsec } x \Leftrightarrow \sec y = x$	$\lvert x \rvert \geq 1$	$0 \leq y \leq \pi, \quad y \neq \frac{\pi}{2}$
$y = \text{arccossec } x \Leftrightarrow \text{cossec } y = x$	$\lvert x \rvert \geq 1$	$-\frac{\pi}{2} \leq y \leq \frac{\pi}{2}, \quad y \neq 0$



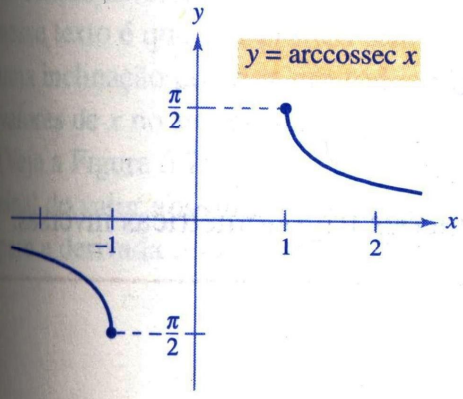
Domínio: $[-1, 1]$
Imagem: $[-\pi/2, \pi/2]$



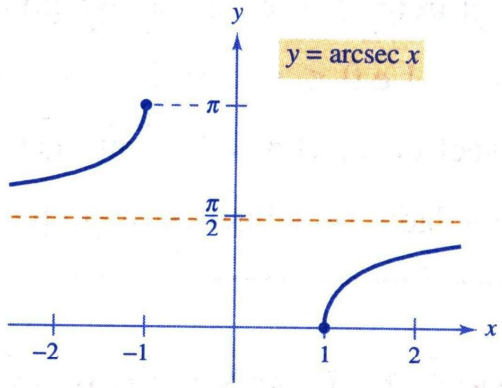
Domínio : $[-1, 1]$
Imagem : $[0, \pi]$



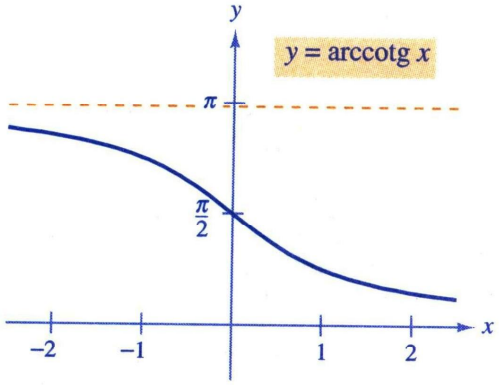
Domínio : $(-\infty, \infty)$
Imagem : $(-\pi/2, \pi/2)$



Domínio : $(-\infty, -1] \cup [1, \infty)$
Imagem : $[-\pi/2, 0) \cup (0, \pi/2]$



Domínio : $(-\infty, -1] \cup [1, \infty)$
Imagem : $[0, \pi/2) \cup (\pi/2, \pi]$



Domínio : $(-\infty, \infty)$
Imagem : $(0, \pi)$

Figura 5.29