Zadanie 8

9 October, 2023 21:38

$$\operatorname{arctg}(x) = \frac{\pi}{2} - \operatorname{arctg}\left(\frac{1}{x}\right)$$

$\operatorname{tg}\alpha = x \qquad \operatorname{tg}\beta = \frac{1}{x}$

$\alpha + \beta + \frac{\pi}{2} = \pi \Rightarrow \operatorname{tg}^{-1}x + \operatorname{tg}^{-1}\frac{1}{x} = \frac{\pi}{2}$

arctg(x):

Jeśli $|x| \leq 1$ zwróć ATG(x)

Jeśli $x < 0$ $-\frac{\pi}{2} - ATG\left(\frac{1}{x}\right)$

w.p.p. $\frac{\pi}{2} - ATG\left(\frac{1}{x}\right)$