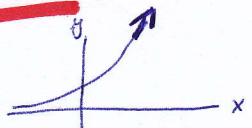


LIMITY Z GRAFŮ:

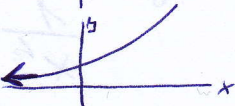
$$\lim_{x \rightarrow \infty} 2^x = +\infty$$



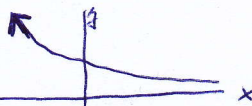
$$\lim_{x \rightarrow \infty} 0,2^x = 0$$



$$\lim_{x \rightarrow \infty} 3^x = \infty$$



$$\lim_{x \rightarrow -\infty} \left(\frac{1}{2}\right)^x = +\infty$$



$$\lim_{x \rightarrow \infty} \log_5 x = +\infty$$



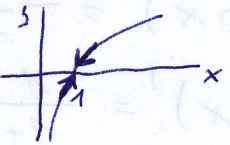
$$\lim_{x \rightarrow \infty} \log_{\frac{1}{5}} x = -\infty$$



$$\lim_{x \rightarrow 0^+} \log x = -\infty$$



$$\lim_{x \rightarrow 1} \ln x = 0$$



$$\lim_{x \rightarrow +\infty} \frac{1}{x} = 0$$



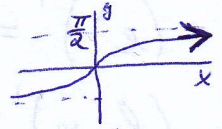
$$\lim_{x \rightarrow 0} \frac{1}{x} = \text{neexist.}$$



$$\lim_{x \rightarrow \infty} \cos x = \text{neexist.}$$



$$\lim_{x \rightarrow +\infty} \arctg x = \frac{\pi}{2}$$



$$\lim_{x \rightarrow -\infty} \text{arccotg} x = \pi$$



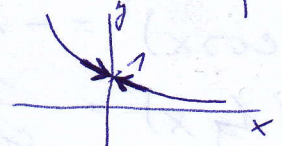
$$\lim_{x \rightarrow \infty} \text{arccotg} x = 0$$



$$\lim_{x \rightarrow 0} \arccos x = \frac{\pi}{2}$$

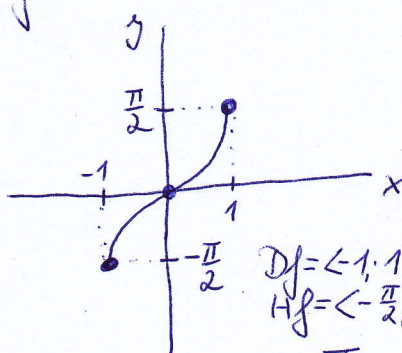


$$\lim_{x \rightarrow 0} \left(\frac{1}{2}\right)^x = 1$$



CYKLOMETRICKÉ FUNKCE:

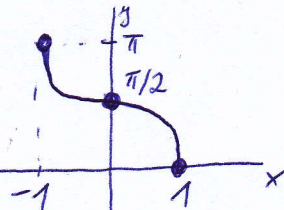
$$y = \arcsin x$$



$$Df = \langle -1, 1 \rangle$$

$$Hf = \langle -\frac{\pi}{2}, \frac{\pi}{2} \rangle$$

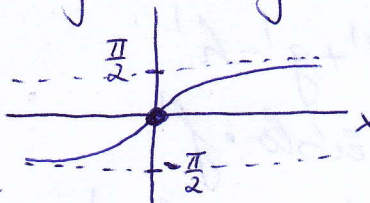
$$y = \arccos x$$



$$Df = \langle -1, 1 \rangle$$

$$Hf = \langle 0, \pi \rangle$$

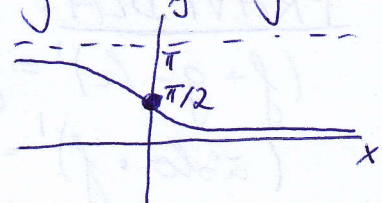
$$y = \text{arctg} x$$



$$Df = \mathbb{R}$$

$$Hf = \langle -\frac{\pi}{2}, \frac{\pi}{2} \rangle$$

$$y = \text{arccotg} x$$



$$Df = \mathbb{R}$$

$$Hf = \langle 0, \pi \rangle$$

$$\arcsin 1 = \frac{\pi}{2}$$

$$\arccos 1 = 0$$

$$\text{arctg} 1 = \frac{\pi}{4}$$

$$\text{arccotg} 1 = \frac{\pi}{4}$$

$$\arcsin 0 = 0$$

$$\arccos 0 = \frac{\pi}{2}$$

$$\text{arctg} 0 = 0$$

$$\text{arccotg} 0 = \frac{\pi}{2}$$

$$\arcsin(-1) = -\frac{\pi}{2}$$

$$\arccos(-1) = \pi$$

$$\text{arctg}(-1) = -\frac{\pi}{4}$$

$$\text{arccotg}(-1) = \frac{3}{4}\pi$$

DEFINIČNÍ OBOR:

$$\frac{1}{f} \quad f \neq 0$$

$$\ln f \quad f > 0$$

$$\arcsin f \quad -1 \leq f \leq 1$$

$$\sqrt[f]{f} \quad f \geq 0$$

$$\log_a f$$

$$\arccos f$$