* *Assímptotes*

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

Assímptota Horizontal

$$\lim\_{x\to \infty }\frac{x-x^{2}}{x^{2}+1}=\frac{\infty }{\infty } IND \lim\_{x\to \infty }\frac{x-x^{2}}{x^{2}+1}=\frac{-1}{1}=-1$$

Assimptota

Assímptota Vertical

$$f\left(x\right)\frac{x-x^{2}}{x^{2}+1} d\left(f\right)=R$$

$ x^{2}+1=0\rightarrow x^{2}=-1 No té solució$

No hi ha

$$f\left(x\right)=\frac{-2x^{2}+5x+3}{4x^{2}-1}$$

Assimptota Horizontal

$$\lim\_{x\to \infty }\frac{-2x^{2}+5x+3}{4x^{2}-1}=\frac{\infty }{\infty }IND \lim\_{x\to \infty }\frac{-2x^{2}+5x+3}{4x^{2}-1}=\frac{-2}{4}=\frac{-1}{2}$$

Assimptota Vertical

$$f\left(x\right)=\frac{-2^{2}+5x+3}{4x^{2}-1} D\left(f\right)=R$$

$$ 4x^{2}-1=0\rightarrow 4x^{2}=1\rightarrow x^{2}=\frac{1}{4}$$

$$x\_{1}=+\sqrt{\frac{1 }{4}}=\frac{1}{2} $$

$$x\_{2}=-\sqrt{\frac{1}{4}}=\frac{-1}{2}$$