

$$\lim_{x \rightarrow 5} \frac{x^2 - 2x - 15}{x^2 - 25}$$

Un nombre ou $\pm\infty$

$$= \ll \frac{25 - 10 - 15}{25 - 25} \gg$$

$$= \ll \frac{0}{0} \gg$$

$$= \lim_{x \rightarrow 5} \frac{(x-5)(x+3)}{(x-5)(x-5)}$$

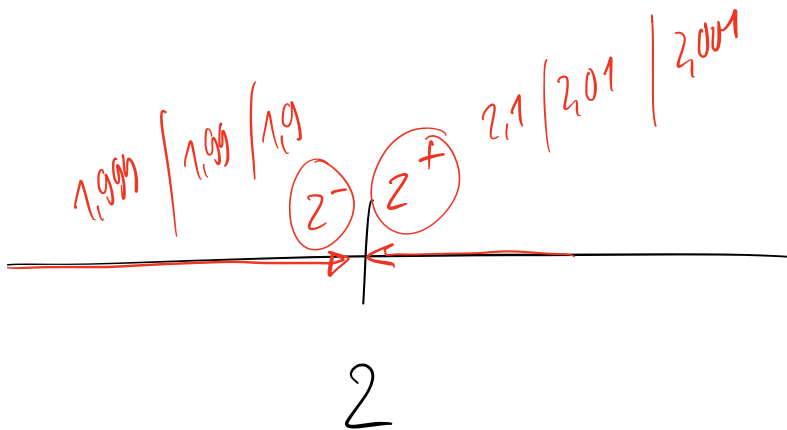
$$= \lim_{x \rightarrow 5} \frac{x+3}{x-5} = \ll \frac{8}{0} \gg = \infty$$

$$\frac{x^2 - 2x - 15}{x^2 - 25} = \frac{(x-5)(x+3)}{(x-5)(x-5)}$$

$x \rightarrow 5$

$$\ll \frac{5+3}{5-5} \gg = \ll \frac{8}{0} \gg = \infty$$

$$\frac{39}{12.5} = \frac{1}{5}$$



1 2nd LN ^{e^x}

$e^1 = e$

$$Q(t) = Q_0 \cdot e^{ct}$$

$$T = 37 \cdot e^{-0,002 \cdot t}$$

↑
25° après t minutes

$$25 = 37 \cdot e^{-0,002 \cdot t}$$

↓ $\div 37$

$$e^x = u \Leftrightarrow x = \ln u$$

$$\frac{25}{37} = e^{-0,002 \cdot t}$$

$$\Leftrightarrow -0,002 \cdot t = \ln\left(\frac{25}{37}\right)$$

$$600 = 1000 \cdot e^{c \cdot 3}$$

$$0,6 = e^{c \cdot 3}$$

$$\ln 0,6 = 3c$$

$$c = \frac{\ln 0,6}{3}$$

$\div 1000$

logarithme

$$e^x = u \Leftrightarrow x = \ln u$$

FORMULAIRE