

# LIMITS HABITUALS

$$\lim_{x \rightarrow \infty} e^x = \infty \text{ and } \lim_{x \rightarrow -\infty} e^x = 0$$

$$\lim_{x \rightarrow \infty} \ln(x) = \infty \text{ and } \lim_{x \rightarrow 0^+} \ln(x) = -\infty$$

$$\text{If } r > 0 \text{ then } \lim_{x \rightarrow \infty} \frac{c}{x^r} = 0$$

$$\xrightarrow{\quad} \lim_{x \rightarrow \pm \infty} \frac{c}{x^2} = 0$$

$$\lim_{x \rightarrow \pm \infty} x^r = \infty \text{ for even } r$$

$$\xrightarrow{\quad} \lim_{x \rightarrow +\infty} x^2 = +\infty \text{ \& \& } \lim_{x \rightarrow -\infty} x^2 = +\infty$$

$$\lim_{x \rightarrow \infty} x^r = \infty \text{ \& } \lim_{x \rightarrow -\infty} x^r = -\infty \text{ for odd } r$$

$$\xrightarrow{\quad} \lim_{x \rightarrow -\infty} x^3 = -\infty$$

$$\frac{c}{0} = \pm \infty$$

Atenció al  
signe !!!

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