

## LIMITI IN FINITI E FORME INDETERMINATE

$x_0$  può essere un numero reale,  $+\infty$  oppure  $-\infty$

$\lim_{x \rightarrow x_0} f(x)$	$\lim_{x \rightarrow x_0} g(x)$	$\lim_{x \rightarrow x_0} [f(x) + g(x)]$
$l$	$+\infty$	$+\infty$
$l$	$-\infty$	$-\infty$
$+\infty$	$+\infty$	$+\infty$
$-\infty$	$-\infty$	$-\infty$

FORMA INDETERMINATA  $+\infty - \infty$

Es

$$x_0 = 0 \quad f(x) = \frac{1}{x^2} + 5 \quad \text{e} \quad g(x) = -\frac{1}{x^2}$$

$$\begin{aligned} \lim_{x \rightarrow 0} f(x) &= \lim_{x \rightarrow 0} \left( \frac{1}{x^2} + 5 \right) = \lim_{x \rightarrow 0} \left( \frac{1}{x^2} \right) + 5 = \\ &= +\infty + 5 = +\infty \end{aligned}$$

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