



$f(x) = \frac{x^3}{(x+1)^2}$ 
 $Df = \mathbb{R} \setminus \{-1\}$

$\lim_{x \downarrow -1} \frac{x^3}{(x+1)^2} = -\infty$ 
 $\lim_{x \uparrow -1} \frac{x^3}{(x+1)^2} = -\infty$

$\lim_{x \downarrow -1} \frac{x^3}{(x+1)^2}$

$x \downarrow -1$

$\frac{(-0.99)^3}{(-0.99+1)^2} = \frac{-0.98}{(0.01)^2} = -\infty$

$x \uparrow -1$

$\frac{(-1.01)^3}{(-1.01+1)^2} = \frac{-1.03}{(-0.01)^2} = -\infty$