1. $f(x,y) = \frac{x^4 y^4}{(x^2+y^4)^3}$

   $\lim_{x \to 0} f(x, mx) \equiv$

   $\lim_{x \to 0} \frac{x^8 m^4}{(x^2+(mx)^4)^3} =$

   $\lim_{x \to 0} \frac{x^8 m^4}{(x^4+2x^2(mx)^4+(mx)^8)((x^2+(mx)^4)}$

   $\lim_{x \to 0} \frac{x^8 m^4}{x^6+3x^8 m^4+3x^{10}m^8+m^{12}x^{12}} = 0$

2. $f(x,y) = \frac{x^2}{x^2+y^2-x}$

   $\lim_{x \to 0} f(x, mx) \equiv$

   $\lim_{x \to 0} \frac{x^2}{x^2+mx^2-x} =$

   $\lim_{x \to 0} \frac{x\!\!\!/^2}{x\!\!\!/(x(1+m)-1)} = 0$

   $\lim_{x \to 0} f(x, x) =$

   $\lim_{x \to 0} \frac{x^2}{x^2 + x - x} = 1$

   Si $m = 0$ da 1, sino $0 \Rightarrow \nexists L$