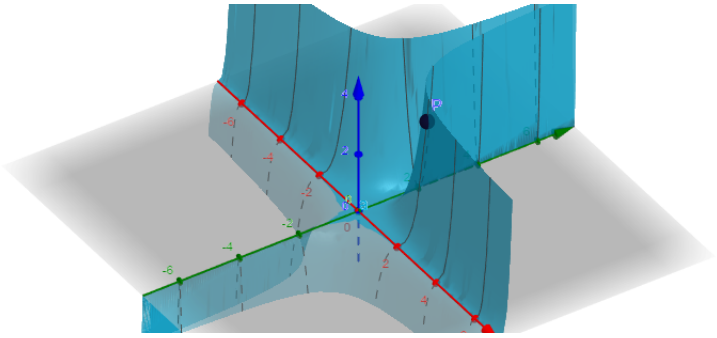
1. $f(x,y) = x^2y^3 \wedge P = (2,1)$
   - $f_x = 2y^3x$
   - $f_y = 3x^2y^2$
   - $\boldsymbol{\nabla} f(P) = (4,12)$



2. $f(x,y) = \frac{y}{1+x^2y^2} \wedge P = (1,1)$
   - $f_x = \frac{2xy^3}{(x^2y^2+1)^2}$
   - $f_y = \frac{1-x^2y^2}{(x^2y^2+1)^2}$
   - $\boldsymbol{\nabla} f(P) = (\frac{1}{2}, 0)$