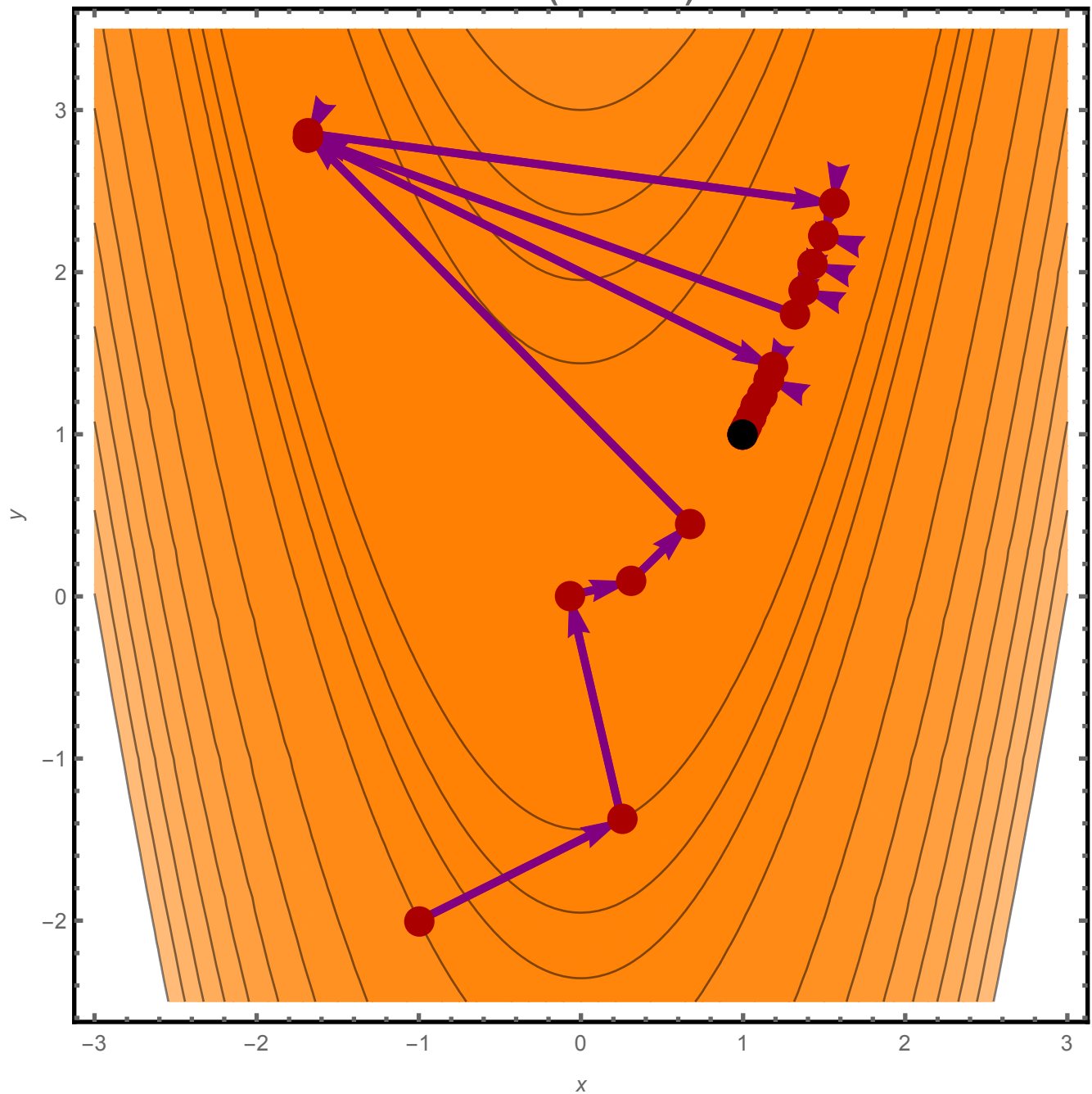$$f(x,y) = 1000\left(x^2 - y\right)^2 + (x-1)^2$$