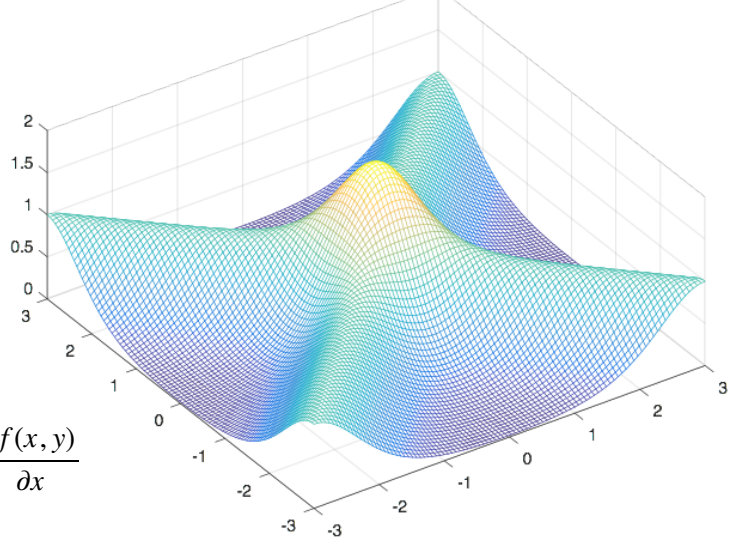
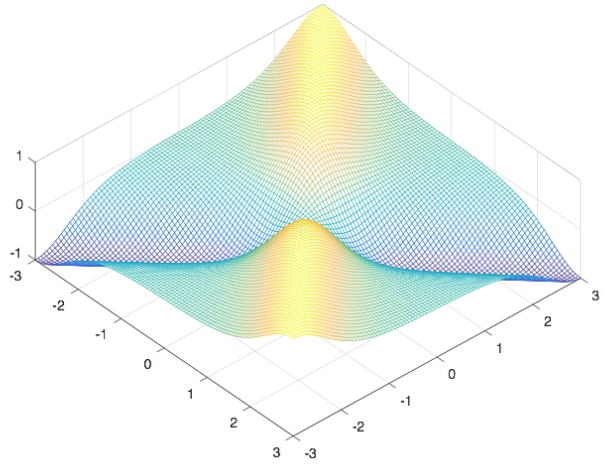
1. Let $f(x,y) = tanh(x+y) + tanh(x-y)$.
   A. Use symbolic differentiation to find $\frac{\partial f(x,y)}{\partial x}$
   B. Draw the following figure



2. Let $f(x,y) = tanh(x+y) + tanh(x-y)$.
   A. Use symbolic differentiation to find $\frac{\partial f(x,y)}{\partial x}$
   B. Draw the following figure



3. Let $g(x) = tanh(x)$.
   A. Apply Richardson extrapolation to approximate $g'(x)$ within $[-3,3]$.
   B. Use symbolic differentiation to determine $g'(x)$ and calculate the mean square approximating error by the Richardson extrapolation.
4. Let $f(x,y) = tanh(x+y) + tanh(x-y)$.
   A. Apply Richardson extrapolation to approximate $\frac{\partial f(x,y)}{\partial x}$ within [−3,3]×[−3,3].
   B. Use symbolic differentiation to determine $\frac{\partial f(x,y)}{\partial x}$ and determine the mean square approximating error by the Richardson extrapolation.
5. Let $f(x,y) = tanh(x+y) + tanh(x-y)$.
   A. Apply Richardson extrapolation to approximate $\frac{\partial f(x,y)}{\partial y}$ within [−3,3]×[−3,3].
   B. Use symbolic differentiation to determine $\frac{\partial f(x,y)}{\partial y}$ and determine the mean square approximating error by the Richardson extrapolation.