


Partials of Images

Partial Derivative

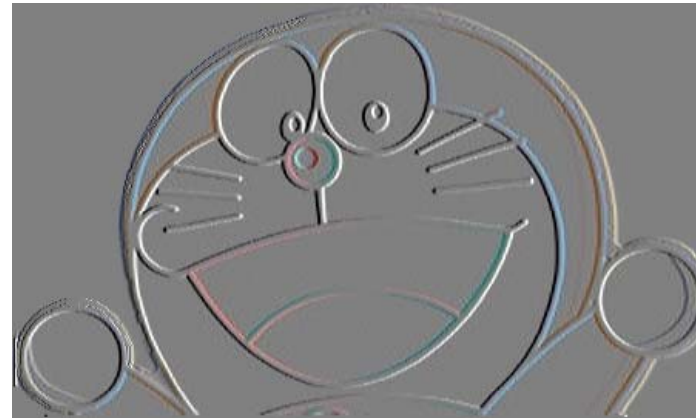
- Derivative of a multi-dimension variable, but in terms of one of the variables while the rest are fixed constant.
- $\frac{\partial f}{\partial x}$, or f_x .
- **Eg.** given $f = x + 2y^2 + xy$, $f_x = 1 + y$, $f_y = 4y + x$

Partials of images?

- Derivative of each dimension individually

- $f(x,y) =$ 

$$f_x =$$
  $\otimes \begin{bmatrix} -1 & 1 \end{bmatrix} =$



$$f_y =$$
  $\otimes \begin{bmatrix} -1 \\ 1 \end{bmatrix} =$

