

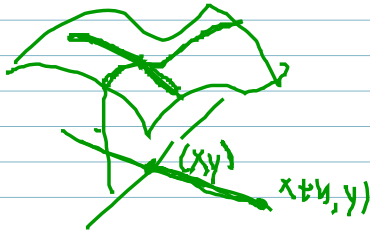
## Partielle afledede

$$f_x(x, y) = \lim_{h \rightarrow 0} \frac{f(x+h, y) - f(x, y)}{h}$$

$$f_y(x, y) = \lim_{h \rightarrow 0} \frac{f(x, y+h) - f(x, y)}{h}$$

$$f(x, y) = x^2 y^3$$

$$f_x(x, y): \quad \textcircled{x^2} y^3$$



$$f_x(x, y) = 2x y^3$$

$$f_y(x, y) = 3x^2 y^2$$

$$g(x, y) = x^2 + y^3$$

$$g_x(x, y) = 2x$$

$$g_y(x, y) = 3y^2$$

$$\begin{array}{c} x^2 \\ \downarrow \\ \underbrace{x^2}_{\text{constant}} + y^3 \\ \downarrow \\ \underbrace{y^3}_{\text{constant}} \end{array}$$

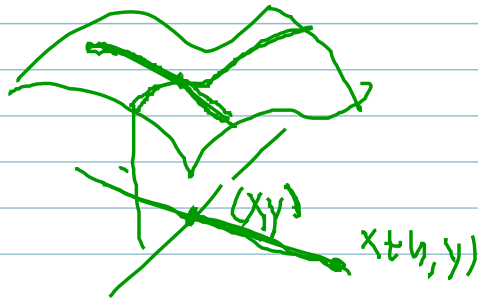
# Partielle afledede

$$f_x(x,y) = \lim_{h \rightarrow 0} \frac{f(x+h,y) - f(x,y)}{h}$$

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$$f(x,y) = x^2 y^3$$

$$f_x(x,y) = \textcircled{x^2 \cdot C} \uparrow y^3$$



$$f_x(x,y) = 2x y^3$$

$$f_y(x,y) = 3x^2 y^2$$

$$g(x,y) = x^2 + y^3$$

$$g_x(x,y) = 2x$$

$$g_y(x,y) = 3y^2$$

$$\begin{array}{c} x^2 \\ \downarrow \\ \cancel{C} \cdot y^3 \\ \downarrow \\ x^2 + \cancel{C} \cdot y^3 \\ \downarrow \\ \cancel{C} \cdot y^3 \end{array}$$