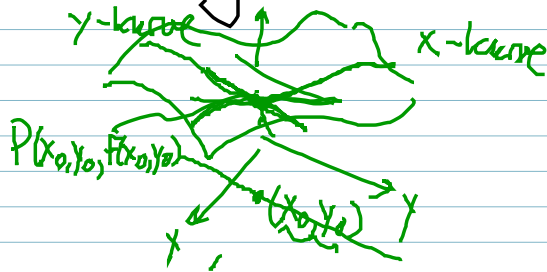


Tangentplan til en graf

$F(x,y)$



Ligning

$$z - F(x_0, y_0) = \underbrace{f_x(x_0, y_0)}_{\text{partial derivative}}(x - x_0) + \underbrace{f_y(x_0, y_0)}_{\text{partial derivative}}(y - y_0)$$

$$f(x, y) = 5 - \underline{yx^2} + \underline{4y^2}$$

~~P(1, 1, 8)~~

$$f_x(x, y) = -2yx$$

$$f_y(x, y) = -x^2 + 8y$$

$$\underline{f_x(1, 1) = -2}$$

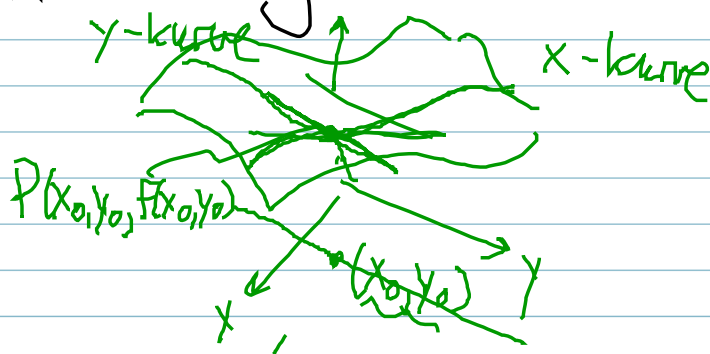
$$\underline{f_y(1, 1) = 7}$$

Ligning

$$z - 8 = -2(x - 1) + 7(y - 1)$$

Tangentplan til en graf

$F(x,y)$



Ligning

$$z - F(x_0, y_0) = \underbrace{F_x(x_0, y_0)}_{f_x(x_0, y_0)}(x - x_0) + \underbrace{F_y(x_0, y_0)}_{f_y(x_0, y_0)}(y - y_0)$$

$$F(x,y) = 5 - \underline{yx^2} + \underline{4y^2}$$

$$P(\underline{1}, \underline{1}, \underline{8})$$

$$f_x(x,y) = -2yx \quad f_y(x,y) = -x^2 + 8y$$

$$\underline{f_x(1,1) = -2} \quad \underline{f_y(1,1) = 7}$$

Ligning

$$z - 8 = -2(x - 1) + 7(y - 1)$$