

Tangent Plane

Method #1

Tangent plane's equation!

On $Z = f(x, y)$

$$Z = f(a, b) + f_x(a, b)(x-a) + f_y(a, b)(y-b)$$

Method #2 On (x, y, z) equation

$$\text{Grad}[f(a, b, c)] = \vec{n}$$

$$r_0 = (a, b, c)$$

$$\text{Tangent plane bl'r } \vec{n} \cdot (r - r_0) = 0$$