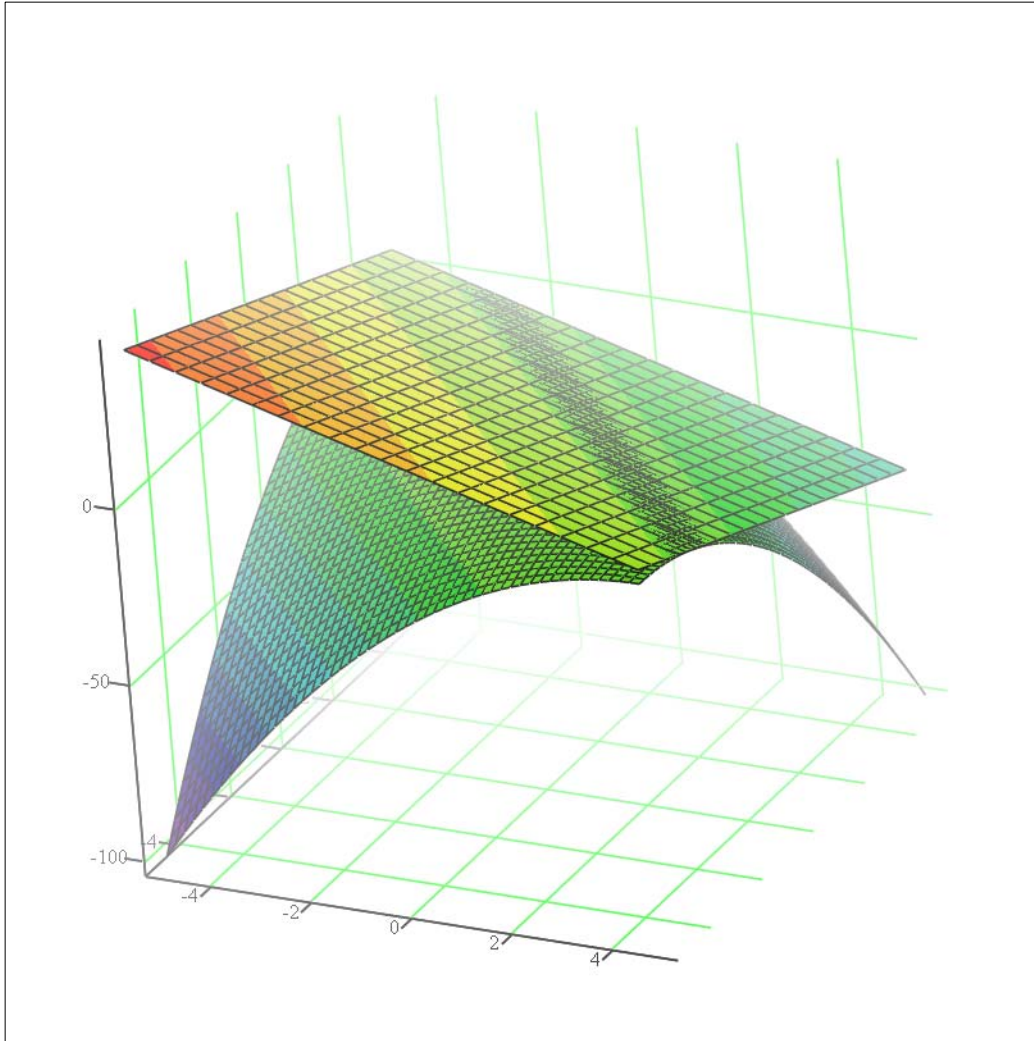


$$u(x, y) := -(x^2 + 2x \cdot y + y^2)$$

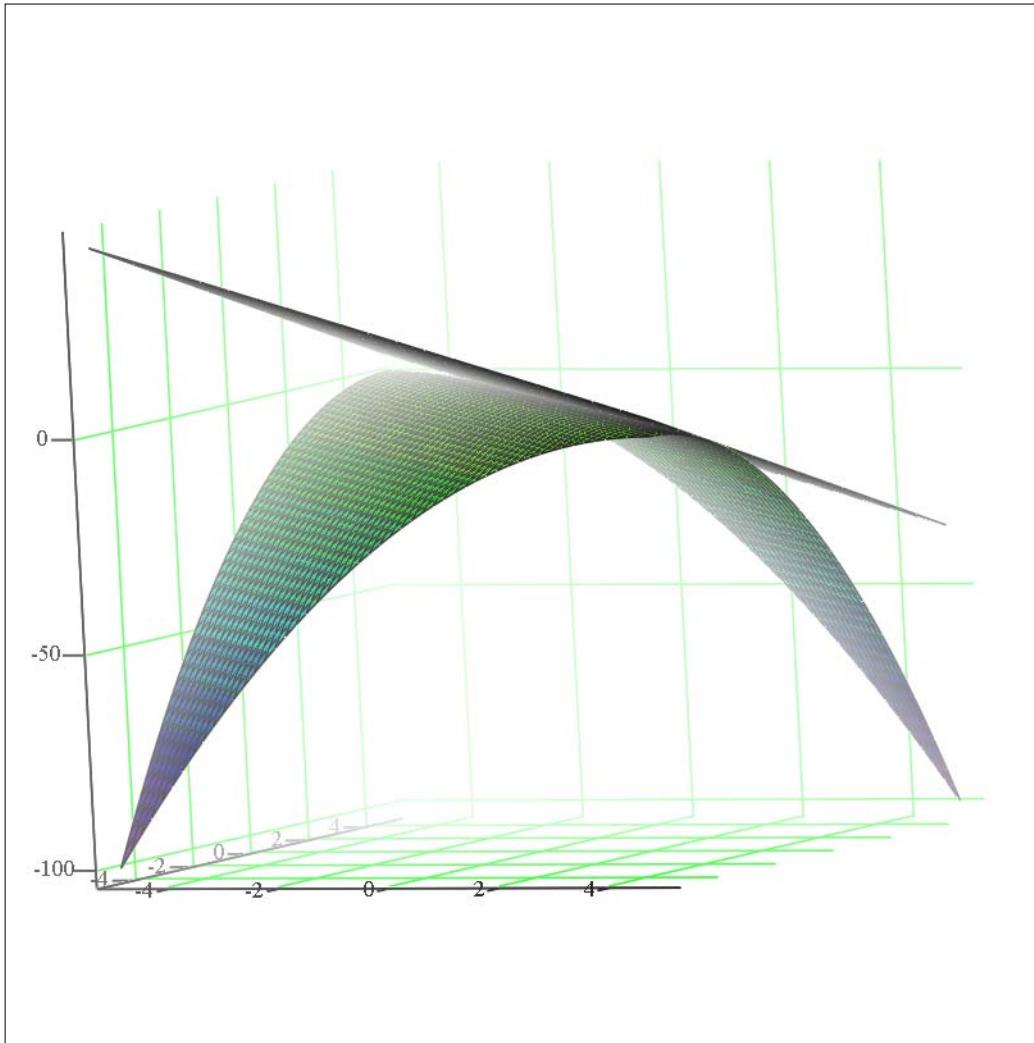
$$x_0 := 1 \quad y_0 := 1 \quad u_0 := u(x_0, y_0)$$

$$u_x(x, y) := \frac{d}{dx}u(x, y) \quad u_{x0} := u_x(x_0, y_0) \quad u_y(x, y) := \frac{d}{dy}u(x, y) \quad u_{y0} := u_y(x_0, y_0)$$

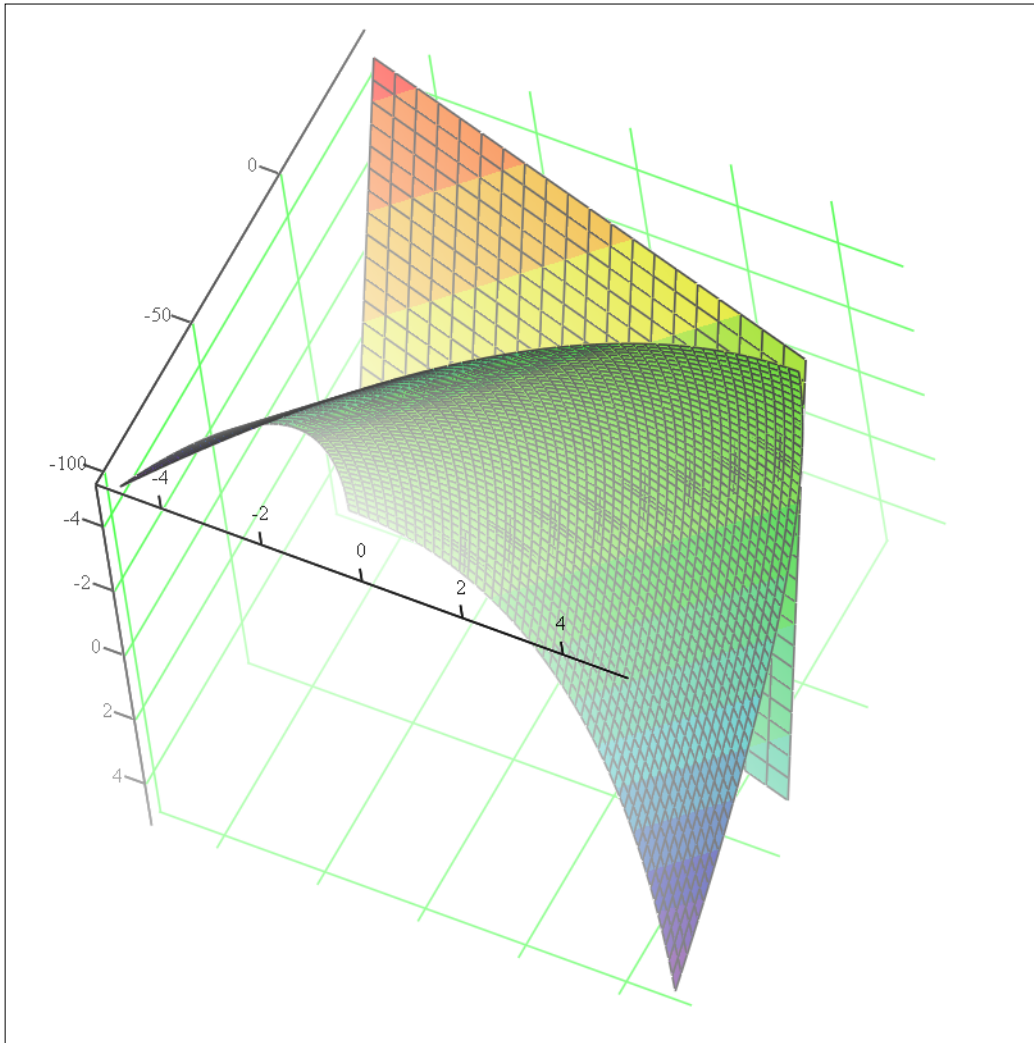
$$v(x, y) := u_0 + u_{x0} \cdot (x - x_0) + u_{y0} \cdot (y - y_0)$$



u, v



u, v



u, v