



$$f(x, y) = \frac{x^2}{9} + \frac{y^2}{4}$$

$$x_6 = 0.885509$$

$$y_6 = 0.015625$$

$$\nabla f(\cdot) = (0.196780, \\ 0.007813)$$

$$\alpha_6 = 1$$

$$\sqrt{x_6^2 + y_6^2} = 0.885647$$