$$f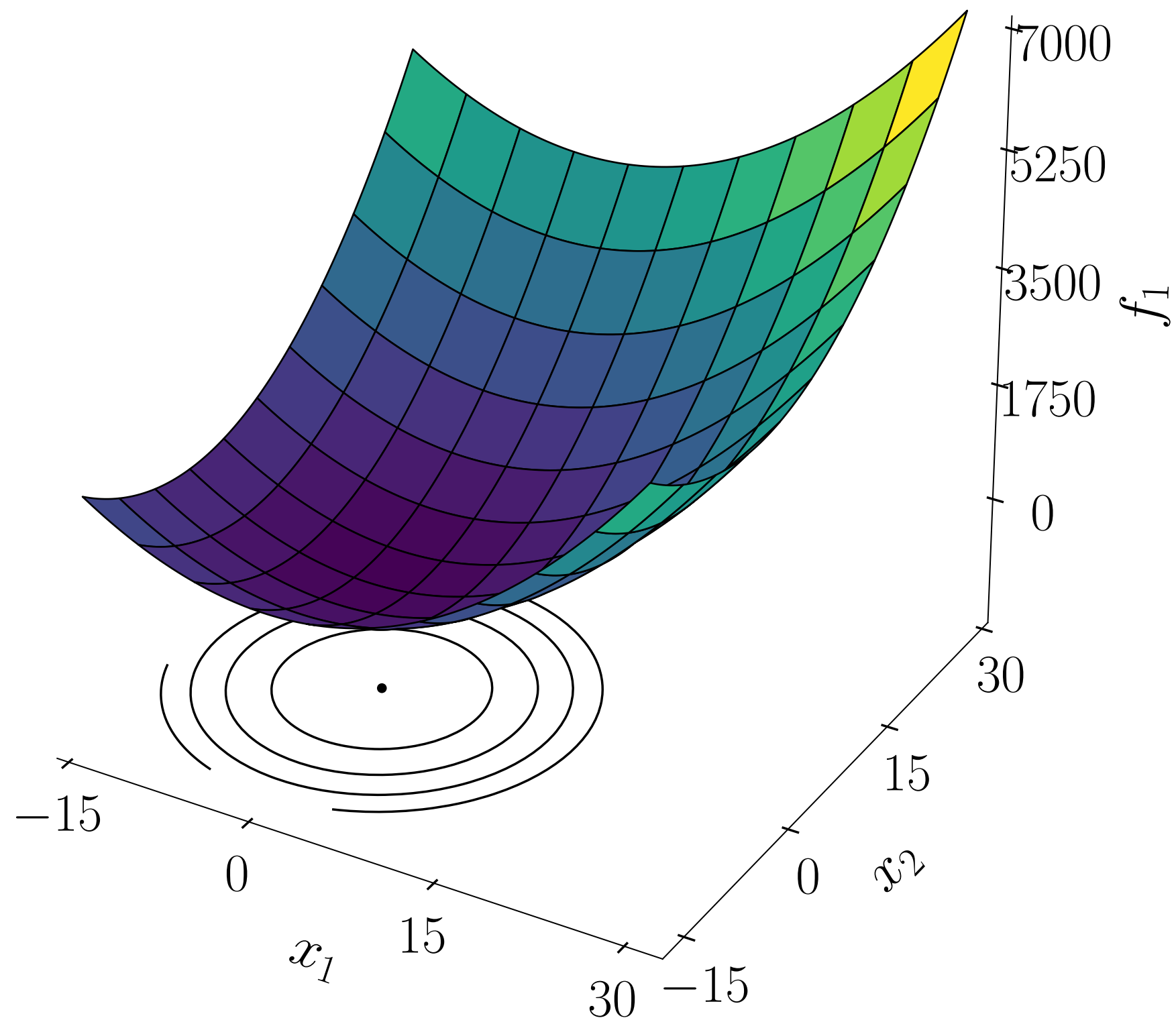_1(x_1, x_2) = 4x_1^2 + 4x_2^2 \qquad f_2(x_1, x_2) = (x_1 - 5)^2 + (x_2 - 5)^2$$