

$$f(x) = 2x_1^2 + x_1x_2 + x_2^2 + x_1 - 3x_2 + 3$$

$$g_1(x) = x_1^2 + x_2^2 - 1 \leq 0$$

$$g_2(x) = -x_1 \leq 0$$

$$g_3(x) = -x_2 \leq 0$$

