

$$\begin{aligned} f_1(x_1,x_2)&=x_1-4x_1^2-x_1x_2=0 \\ f_2(x_1,x_2)&=2x_2-x_2^2+3x_1x_2=0 \end{aligned}$$

$$x_2=1-4x_1$$

$$\begin{aligned} 0 &= \left(\frac{\mu_{\max} x_2}{k_m + x_2 + k_1 x_2^2} - D \right) x_1 \\ 0 &= (s_f - x_2) D - \left(\frac{x_1}{c} \right) \left(\frac{\mu_{\max} x_2}{k_m + x_2 + k_1 x_2^2} \right) \end{aligned}$$