$Q_1 = (0,0)$

$\frac{\partial f}{\partial x} = \begin{bmatrix} 2-x_2 & -x_1 \\ 4x_1 & -1 \end{bmatrix}$

$A = \begin{bmatrix} 2 & 0 \\ 0 & -1 \end{bmatrix}$ $\lambda_1 = -1$ $V_1 = \begin{bmatrix} 0 \\ 1 \end{bmatrix}$

$\lambda_2 = 2$ $V_2 = \begin{bmatrix} 1 \\ 0 \end{bmatrix}$

$\frac{x}{x}$ $\frac{y}{x}$

$Q_2 = (1,2)$

$A = \begin{bmatrix} 0 & -1 \\ 4 & -4 \end{bmatrix}$ $\lambda_1 = -0.5 + j1.9365$ $V_1 = \begin{bmatrix} 0.118 + j0.433 \\ 0.894 \end{bmatrix}$

$\lambda_2 = -0.5 - j1.9365$ $V_2 = \begin{bmatrix} 0.118 - j0.433 \\ 0.894 \end{bmatrix}$

$\frac{\tan(\quad)}{\arctan}$

$Q_3 = (-1,2)$

$A = \begin{bmatrix} 0 & 1 \\ -4 & -1 \end{bmatrix}$ $\lambda_1 = -0.5 + j1.9365$ $V_1 = \begin{bmatrix} 0.118 + j0.433 \\ -0.894 \end{bmatrix}$

$\lambda_2 = -0.5 - j1.9365$ $V_2 = \begin{bmatrix} 0.118 - j0.433 \\ -0.894 \end{bmatrix}$

Q_1 = 鞍点

Q_2、Q_3 稳定焦点