

$$6.4.2. \quad \dot{x} = x(3 - 2x - y) = 0, \quad \text{get } (0, 2), (1, 1), (\frac{3}{2}, 0) \text{ and } (0, 0),$$

$$\dot{y} = y(2 - x - y) = 0,$$

$$A = \begin{pmatrix} -4x-y+3 & -x \\ -y & -x-2y+2 \end{pmatrix} \quad (0, 0) A = \begin{pmatrix} 3 & 0 \\ 0 & 2 \end{pmatrix}$$

$$(0, 2) A = \begin{pmatrix} 1 & 0 \\ -2 & -2 \end{pmatrix} \quad \lambda = 1, -2$$

$$(1, 1) A = \begin{pmatrix} -2 & -1 \\ -1 & -1 \end{pmatrix} \quad \Delta = 1 \quad \lambda = \frac{-3 + \sqrt{5}}{2}$$

$$(\frac{3}{2}, 0) A = \begin{pmatrix} 3 & -\frac{3}{2} \\ 0 & \frac{1}{2} \end{pmatrix} \quad \Delta = -\frac{3}{2} \quad \lambda = \frac{-5 \pm \sqrt{(-\frac{5}{2})^2 - \cancel{\frac{3}{2}}}}{2} = \frac{17}{2}$$

