

$$2) \begin{bmatrix} 1 & -2 & -1 & 3 \\ 2 & 3 & 0 & 1 \\ 1 & 0 & -4 & -2 \\ 0 & -1 & 3 & 1 \end{bmatrix}$$

$$* A = [1, -2, -1, -3, 2, 3, 0, 1, 1, 0, -4, -2, 0, -1, 3, 1]$$

$$* \lambda_g(A)$$

$$= 2.4323 + 2.2437i$$

$$2.4323 - 2.2437i$$

$$-1.9323 + 1.7651i$$

$$-1.9323 - 1.7651i$$

* The system is unstable because ~~gas~~ values are combined of both positive & negative values.