

$$\begin{bmatrix} 0 & 0 & 2 \end{bmatrix}$$

$$\begin{array}{r|l} 2 & 6 \\ 3 & 3 \\ \hline & 1 \end{array}$$

factors : $= (x-2)^2 (x-3)$

characteristic polynomial

$$= (x^2 + 4x - 12) (x-3)$$

$$= x^3 - 3x^2 - 4x - 12 - 4x^2 + 12x$$

$$x^3 - 7x^2 + 8x - 12$$

Minimal polynomial $(x-2)(x-3)$. $\text{case } (x-2)^2(x-3)$

$$\begin{bmatrix} 1 & -2 & 14 \\ 0 & -7 & 7 \\ 0 & 0 & -1 \end{bmatrix}$$

$(A-2I)(A-3I)$