

eye "I"

order = 2

$$\begin{array}{c}
 \xrightarrow{2 \cdot \text{order} + 1} \\
 \begin{array}{c} \text{order} \quad \text{order} + 1 \end{array} \\
 \begin{array}{c} \text{eye}(\text{order}) \\ \text{eye}(3) \end{array} \\
 \begin{array}{c} \text{zero}(2,3) \end{array} \\
 \begin{array}{c} \text{order} \\ \text{order} + 1 \end{array} \\
 \xrightarrow{2 \cdot \text{order} + 1}
 \end{array}$$

$$\begin{bmatrix} h_d[0] \\ h_d[1] \\ h_d[2] \\ h_d[3] \\ h_d[4] \end{bmatrix} = \begin{bmatrix} 0 & 0 & 1 & 0 & 0 \\ -h_d[0] & -h_d[0] & 0 & 1 & 0 \\ -h_d[1] & -h_d[1] & 0 & 0 & 1 \\ -h_d[2] & -h_d[1] & 0 & 0 & 0 \\ -h_d[3] & -h_d[2] & 0 & 0 & 0 \end{bmatrix} \cdot \begin{bmatrix} a_1 \\ a_2 \\ b_0 \\ b_1 \\ b_2 \end{bmatrix}$$

$B \qquad A \qquad X$

$$[x \ y] = \begin{bmatrix} x & y \end{bmatrix}$$

$$\begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} x \\ y \end{bmatrix}$$

order = 5

$$A^{-1} \mid B = A \cdot X$$

$$\boxed{A^{-1}} \cdot B = X$$