

(5)

$$\begin{pmatrix} a_{00} & & & & \\ a_{10} & a_{11} & & & \\ a_{20} & a_{21} & a_{22} & & \\ a_{30} & a_{31} & a_{32} & a_{33} & \\ a_{40} & a_{41} & a_{42} & a_{43} & a_{44} \end{pmatrix} \begin{pmatrix} x_0 \\ x_1 \\ x_2 \\ x_3 \\ x_4 \end{pmatrix} = \begin{pmatrix} b_0 \\ b_1 \\ b_2 \\ b_3 \\ b_4 \end{pmatrix}$$

$$a_{00}x_0 = b_0$$

$$a_{10}x_0 + a_{11}x_1 = b_1$$

$$a_{20}x_0 + a_{21}x_1 + a_{22}x_2 = b_2$$

$$a_{30}x_0 + a_{31}x_1 + a_{32}x_2 + a_{33}x_3 = b_3$$

$$a_{40}x_0 + a_{41}x_1 + a_{42}x_2 + a_{43}x_3 + a_{44}x_4 = b_4$$

$$x_0 = \frac{b_0}{a_{00}}$$

$$x_1 = \frac{b_1 - a_{10}x_0}{a_{11}}$$

$$x_2 = \frac{b_2 - (a_{20}x_0 + a_{21}x_1)}{a_{22}}$$

$$x_3 = \frac{b_3 - (a_{30}x_0 + a_{31}x_1 + a_{32}x_2)}{a_{33}}$$

$$x_4 = \frac{b_4 - (a_{40}x_0 + a_{41}x_1 + a_{42}x_2 + a_{43}x_3)}{a_{44}}$$

$$x_i = \frac{b_i - \sum_{j=0}^{i-1} a_{ij}x_j}{a_{ii}}$$