

$$\left[\begin{array}{ccc} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{array} \right] = \left[\begin{array}{ccc} 1 & 0 & 0 \\ m_{21} & 1 & 0 \\ m_{31} & m_{32} & 1 \end{array} \right] \left[\begin{array}{ccc} u_{11} & u_{12} & u_{13} \\ 0 & u_{22} & u_{23} \\ 0 & 0 & u_{33} \end{array} \right]$$

1-y wiersz

$$a_{11} = u_{11} \Rightarrow a_{12} = u_{12} \Rightarrow a_{13} = u_{13}$$

1-a kolumna

$$a_{21} = m_{21} \underline{u_{11}} \Rightarrow m_{21}$$

$$a_{31} = m_{31} \underline{u_{11}} \Rightarrow m_{31}$$

Dalej

$$a_{22} = \underline{m_{21}} \underline{u_{12}} + u_{22} \Rightarrow u_{22}$$

$$a_{23} = \underline{m_{21}} \underline{u_{13}} + u_{23} \Rightarrow u_{23}$$

Pozostało

$$\underline{m_{31}} \underline{u_{12}} + m_{32} \underline{u_{22}} = a_{32} \Rightarrow m_{32}$$

oraz

$$\underline{m_{31}} \underline{u_{13}} + \underline{m_{32}} \underline{u_{23}} + u_{33} = a_{33} \Rightarrow u_{33}$$

Metoda Doolittle