

Maticové rovnice

Vypočítejte z rovnic matici X:

$$AX - B = 2X + C$$

$$A = \begin{pmatrix} 1 & -1 \\ 2 & 1 \end{pmatrix}, B = \begin{pmatrix} 2 & 0 \\ 1 & 2 \end{pmatrix}, C = \begin{pmatrix} -4 & -3 \\ 6 & -2 \end{pmatrix}$$

$$X = \begin{pmatrix} 3 & 1 \\ -1 & 2 \end{pmatrix}$$

$$BX - A = B$$

$$A = \begin{pmatrix} -2 & 1 \\ 8 & 1 \end{pmatrix}, B = \begin{pmatrix} 1 & 0 \\ -1 & 2 \end{pmatrix}$$

$$X = \begin{pmatrix} -1 & 1 \\ 3 & 2 \end{pmatrix}$$

$$AX - 2A = BX - C$$

$$A = \begin{pmatrix} 1 & 2 \\ -1 & 1 \end{pmatrix}, B = \begin{pmatrix} 0 & 2 \\ 1 & 2 \end{pmatrix}, C = \begin{pmatrix} 1 & 5 \\ 2 & 1 \end{pmatrix}$$

$$X = \begin{pmatrix} 1 & -1 \\ 2 & 1 \end{pmatrix}$$

$$XA - 2X = B$$

$$A = \begin{pmatrix} 2 & 3 \\ -1 & 0 \end{pmatrix}, B = \begin{pmatrix} -1 & 1 \\ -2 & -7 \end{pmatrix}$$

$$X = \begin{pmatrix} 1 & 1 \\ -1 & 2 \end{pmatrix}$$

$$2X - AX = A + B$$

$$A = \begin{pmatrix} 1 & 0 \\ -2 & 1 \end{pmatrix}, B = \begin{pmatrix} 0 & 1 \\ 2 & 5 \end{pmatrix}$$

$$X = \begin{pmatrix} 1 & 1 \\ -2 & 4 \end{pmatrix}$$

$$BX - AB = C$$

$$A = \begin{pmatrix} 1 & -1 \\ 0 & 2 \end{pmatrix}, B = \begin{pmatrix} 1 & -1 \\ 2 & 3 \end{pmatrix}, C = \begin{pmatrix} 5 & 5 \\ -1 & -4 \end{pmatrix}$$

$$X = \begin{pmatrix} 3 & 1 \\ -1 & 0 \end{pmatrix}$$

$$XA - B = XB + C$$

$$A = \begin{pmatrix} -3 & 2 \\ 1 & 0 \end{pmatrix}, B = \begin{pmatrix} 3 & 1 \\ 0 & 2 \end{pmatrix}, C = \begin{pmatrix} 5 & -6 \\ 1 & -4 \end{pmatrix}$$

$$X = \begin{pmatrix} -1 & 2 \\ 0 & 1 \end{pmatrix}$$

$$XA - A = B$$

$$A = \begin{pmatrix} 2 & 1 \\ 1 & -1 \end{pmatrix}, B = \begin{pmatrix} 5 & 1 \\ -3 & 0 \end{pmatrix}$$

$$X = \begin{pmatrix} 3 & 1 \\ -1 & 0 \end{pmatrix}$$

$$2X + A = B$$

$$A = \begin{pmatrix} 1 & -3 \\ 2 & 5 \end{pmatrix}, B = \begin{pmatrix} 3 & 5 \\ -2 & 7 \end{pmatrix}$$

$$X = \begin{pmatrix} 1 & 4 \\ -2 & 1 \end{pmatrix}$$

$$AX - B = C$$

$$A = \begin{pmatrix} 1 & 3 \\ -2 & 1 \end{pmatrix}, B = \begin{pmatrix} 1 & 2 \\ 1 & 0 \end{pmatrix}, C = \begin{pmatrix} 2 & -3 \\ 0 & -5 \end{pmatrix}$$

$$X = \begin{pmatrix} 0 & 2 \\ 1 & -1 \end{pmatrix}$$

$$AX + I = B$$

$$A = \begin{pmatrix} 1 & 3 \\ -2 & 5 \end{pmatrix}, B = \begin{pmatrix} -8 & 1 \\ -26 & -1 \end{pmatrix}$$

$$X = \begin{pmatrix} 3 & 1 \\ -4 & 0 \end{pmatrix}$$

$$AX - C = B$$

$$A = \begin{pmatrix} 1 & 3 \\ -2 & 1 \end{pmatrix}, B = \begin{pmatrix} -5 & 4 \\ -4 & -3 \end{pmatrix}, C = \begin{pmatrix} 2 & 1 \\ 3 & 0 \end{pmatrix}$$

$$X = \begin{pmatrix} 0 & 2 \\ -1 & 1 \end{pmatrix}$$