

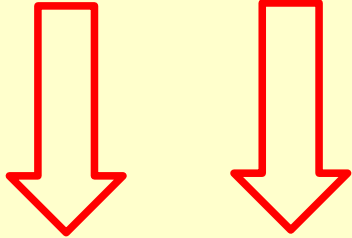
## Inhalt

1. Voraussetzung

2. Addition

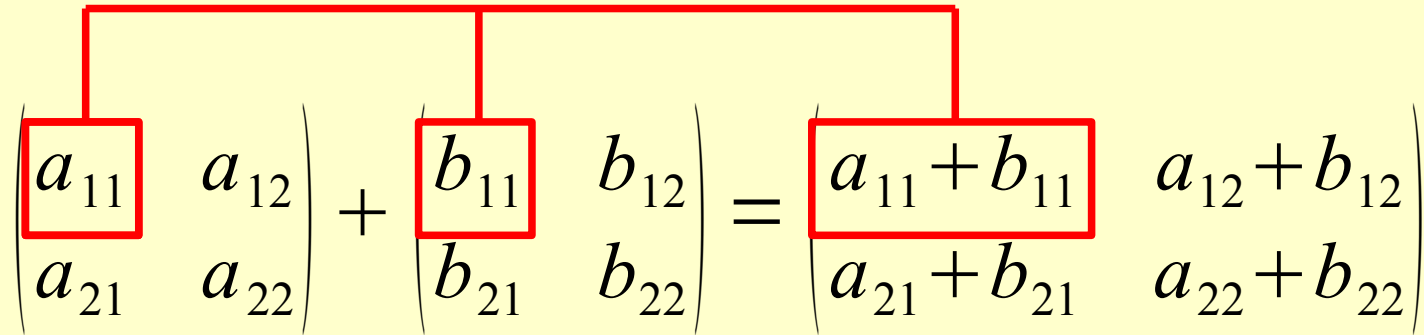
3. Subtraktion

# 1. Voraussetzung

$$A \pm B = C$$


identische Zeilen- und Spaltenanzahl

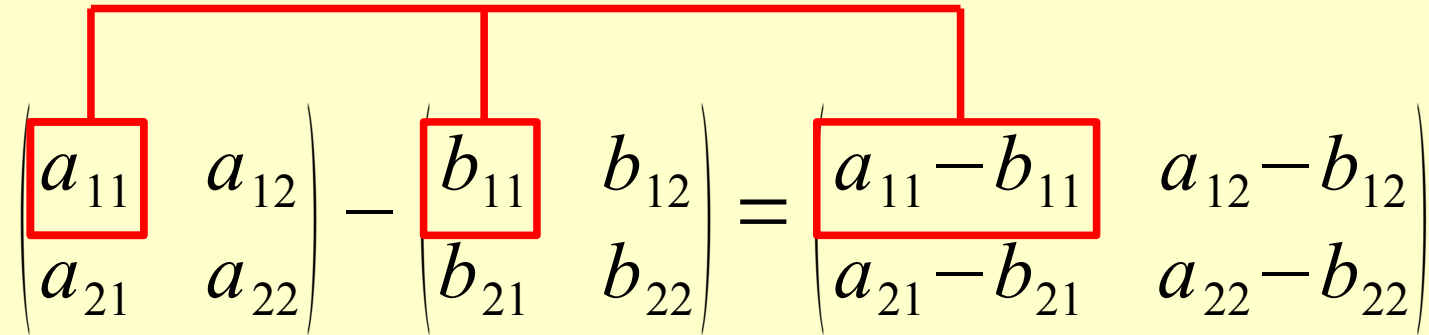
## 2. Addition

$$\begin{pmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{pmatrix} + \begin{pmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{pmatrix} = \begin{pmatrix} a_{11} + b_{11} & a_{12} + b_{12} \\ a_{21} + b_{21} & a_{22} + b_{22} \end{pmatrix}$$


## 2. Addition - Zahlenbeispiel

$$\begin{pmatrix} \boxed{1} & 2 \\ 3 & 4 \end{pmatrix} + \begin{pmatrix} \boxed{5} & 6 \\ 7 & 8 \end{pmatrix} = \begin{pmatrix} \boxed{1+5} & 2+6 \\ 3+7 & 4+8 \end{pmatrix} = \begin{pmatrix} \boxed{6} & 8 \\ 10 & 12 \end{pmatrix}$$

### 3. Subtraktion

$$\begin{pmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{pmatrix} - \begin{pmatrix} b_{11} & b_{12} \\ b_{21} & b_{22} \end{pmatrix} = \begin{pmatrix} a_{11} - b_{11} & a_{12} - b_{12} \\ a_{21} - b_{21} & a_{22} - b_{22} \end{pmatrix}$$


### 3. Subtraktion - Zahlenbeispiel

$$\begin{pmatrix} 8 & 7 \\ 6 & 5 \end{pmatrix} - \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix} = \begin{pmatrix} 8-1 & 7-2 \\ 6-3 & 5-4 \end{pmatrix} = \begin{pmatrix} 7 & 5 \\ 3 & 1 \end{pmatrix}$$
