

# „Knack die Box“ - Verpackte Zahlen

- Es gilt :
- In jeder Schachtel liegen gleich viele Hölzchen.
  - Auf beiden Seiten des Gleichheitszeichens liegen gleich viele Hölzchen.



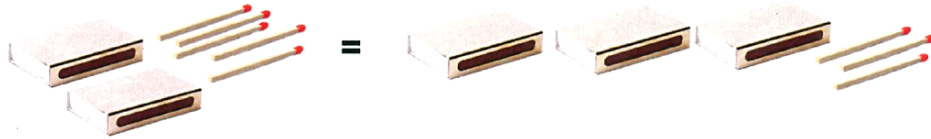
Situation 1



Situation 1

$$\begin{aligned} x+5 &= 3x+1 & | -x \\ 5 &= 2x+1 & | -1 \\ 4 &= 2x & | :2 \\ \underline{\underline{2}} &= \underline{\underline{x}} \end{aligned}$$

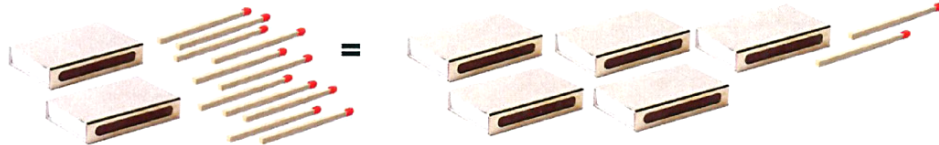
Situation 2



Situation 2

$$\begin{aligned} 2x+5 &= 3x+3 & | -2x \\ 5 &= x+3 & | -3 \\ \underline{\underline{2}} &= \underline{\underline{x}} \end{aligned}$$

Situation 3



Situation 3

$$\begin{aligned} 2x+11 &= 5x+2 & | -2x \\ 11 &= 3x+2 & | -2 \\ 9 &= 3x & | :3 \\ \underline{\underline{3}} &= \underline{\underline{x}} \end{aligned}$$

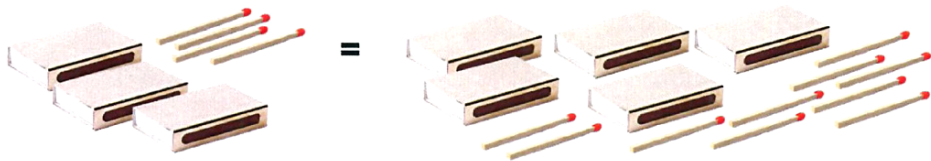
Situation 4



Situation 4

$$\begin{aligned} 4x+4 &= 3x+9 & | -3x \\ x+4 &= 9 & | -4 \\ \underline{\underline{x}} &= \underline{\underline{5}} \end{aligned}$$

Situation 5

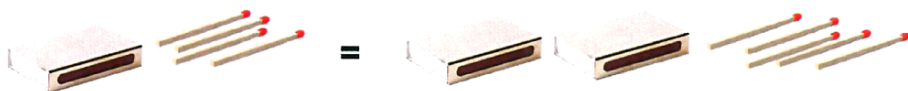


Situation 5

$$\begin{aligned} 3x+4 &= 5x+10 & | -3x \\ 4 &= 2x+10 & | -10 \\ -6 &= 2x & | :2 \\ \underline{\underline{-3}} &= \underline{\underline{x}} \end{aligned}$$

Rechnerische Lösung: ja.

Situation 6



Situation 6

$$\begin{aligned} x+4 &= 2x+5 & | -x \\ 4 &= x+5 & | -5 \\ \underline{\underline{-1}} &= \underline{\underline{x}} \end{aligned}$$

„Praktische“ Lösung: nein!