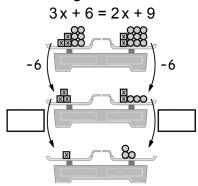
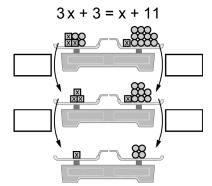
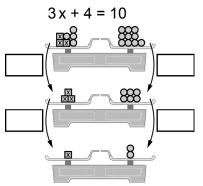
Gleichungen durch Umformen lösen

1 Die Gleichungen werden durch Waagen dargestellt. Schreibe die Umformungsschritte und die Lösungen auf.







2 Ergänze.

a)

5 + x = 12x =

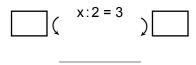
b)

x - 3 = 5

c)

	9 x = 45)
--	----------	---

d)



e)

5x - 26	6 = 19)	
		_

f)

8 + 4 x	= 24)
	\

3 Löse die Gleichung mit Aquivalenzumformungen. Mache die Probe.

a) x - 13 = 6

+13

b) 9 + x = 24

c) 4x = 48

x = 19

d) x:3=6

e) x - 5 = 12

f) 8x - 10 = 78

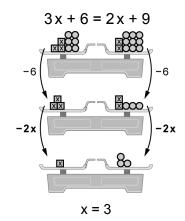
9) 11x = 52 + 7x

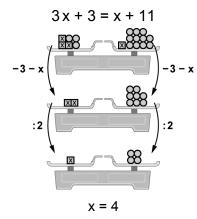
h) 3x + 14 = 62

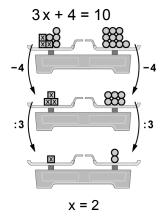
2x = 42 - x

Gleichungen | Fördern

Gleichungen durch Umformen lösen – Lösung







2

a)
$$\begin{bmatrix} -5 \end{bmatrix} \begin{pmatrix} 5 + x = 12 \\ x = 7 \end{pmatrix} \boxed{-5}$$

b)
$$x - 3 = 5$$
 $x = 8$

c)
$$9x = 45$$
 $x = 5$ $(9x = 45)$

e)

$$+26$$
 $(5x - 26 = 19)$ $+26$
 $5x = 45$ $(5x - 26 = 19)$ $+26$
 $5x = 45$ $(5x - 26 = 19)$ $+26$

f)
$$\begin{array}{c|c}
-8 & (8 + 4x = 24) \\
\hline
-8 & 4x = 16 \\
\hline
\cdot 4 & x = 4
\end{array}$$

3

a)
$$x - 13 = 6$$

 $x = 19$

$$|+13$$
 b) $9 + x = 24$

d)
$$x:3 = 6$$

 $x = 18$

e)
$$x - 5 = 12$$

 $x = 17$

|-14

1:3

g)
$$11x = 52 + 7x$$

 $4x = 52$
 $x = 13$

|.3

h)
$$3x + 14 = 62$$

 $3x = 48$
 $x = 16$

x = 15

i)
$$2x = 42 - x$$
 |+x
 $3x = 42$ |:3
 $x = 14$