

1. Bez

Gleichungen

Lösungen AB 9

1. $6x + 3x = 72$
 $9x = 72$ / :9
 $x = 8$
2. $8x - 3x = 85$
 $5x = 85$ / :5
 $x = 17$
3. $x + 3x + 7x = 176$
 $11x = 176$ / :11
 $x = 16$
4. $13x - 9x = 128$
 $4x = 128$ / :4
 $x = 32$
5. $x + (x + 2) + (x + 4) = 114$
 $x + x + 2 + x + 4 = 114$
 $3x + 6 = 114$ / -6
 $3x = 108$ / :3
 $x = 36$
6. $x + (x + 1) + (x + 2) + (x + 3) = 138$
 $x + x + 1 + x + 2 + x + 3 = 138$
 $4x + 6 = 138$ / -6
 $4x = 132$ / :4
 $x = 33$
7. $5(x + 4) + 2 = 7x$
 $5x + 20 + 2 = 7x$
 $5x + 22 = 7x$ / -5x
 $22 = 2x$ / :2
 $11 = x$
8. $8(x + 3) = 9x + 7$
 $8x + 24 = 9x + 7$ / -8x
 $24 = x + 7$ / -7
 $17 = x$
9. $4x + 8 = 6(x - 3)$
 $4x + 8 = 6x - 18$ / -4x
 $8 = 2x - 18$ / +18
 $26 = 2x$ / :2
 $13 = x$

$$\begin{aligned}
10. \quad & 6(x-5) - 11 = 5x \\
& 6x - 30 - 11 = 5x \\
& 6x - 41 = 5x & / -5x \\
& x - 41 = 0 & / +41 \\
& \underline{x = 41}
\end{aligned}$$

$$\begin{aligned}
11. \quad & 8(x+2) = 11(x-4) \\
& 8x + 16 = 11x - 44 & / -8x \\
& 16 = 3x - 44 & / +44 \\
& 60 = 3x & / :3 \\
& \underline{20 = x}
\end{aligned}$$

$$\begin{aligned}
12. \quad & x + 5x + 13 = 7x + 3 \\
& 6x + 13 = 7x + 3 & / -6x \\
& 13 = x + 3 & / -3 \\
& \underline{10 = x}
\end{aligned}$$

$$\begin{aligned}
13. \quad & 4(22-x) = 2(4x-10) \\
& 88 - 4x = 8x - 20 & / +4x \\
& 88 = 12x - 20 & / +20 \\
& 108 = 12x & / :12 \\
& \underline{9 = x}
\end{aligned}$$

$$\begin{aligned}
14. \quad & 363 - 9x = 282 - 6x & / +9x \\
& 363 = 282 + 3x & / -282 \\
& 81 = 3x & / :3 \\
& \underline{27 = x}
\end{aligned}$$

15. erste Zahl: x
zweite Zahl: $x + 12$
dritte Zahl: $x + 12 + 8$

$$\begin{aligned}
& x + (x + 12) + (x + 20) = 68 \\
& x + x + 12 + x + 20 = 68 \\
& 3x + 32 = 68 & / -32 \\
& 3x = 36 & / :3 \\
& \underline{x = 12}
\end{aligned}$$

Es sind die Zahlen 12, 24 und 32.