

## 1. Bez

## Gleichungen

## Lösungen AB 6

$$\begin{aligned} 1. \quad 2x + 4 &= x + 8 && /-x \\ x + 4 &= 8 && /-4 \\ \underline{\underline{x}} &= \underline{\underline{4}} \end{aligned}$$

$$\begin{aligned} 2. \quad 3 + y &= 6y && /-y \\ 3 &= 5y && /:5 \\ \underline{\underline{0,6}} &= \underline{\underline{y}} \end{aligned}$$

$$\begin{aligned} 3. \quad x + 8 &= 3x && /-x \\ 8 &= 2x && /:2 \\ \underline{\underline{4}} &= \underline{\underline{x}} \end{aligned}$$

$$\begin{aligned} 4. \quad 7t + 3 &= t + 6 && /-t \\ 6t + 3 &= 6 && /-3 \\ 6t &= 3 && /:6 \\ \underline{\underline{t}} &= \underline{\underline{0,5}} \end{aligned}$$

$$\begin{aligned} 5. \quad 9u + 16 &= 13u + 7 && /-9u \\ 16 &= 4u + 7 && /-7 \\ 9 &= 4u && /:4 \\ \underline{\underline{2,25}} &= \underline{\underline{u}} \end{aligned}$$

$$\begin{aligned} 6. \quad 1 + 7w &= 1 + 5w && /-5w \\ 1 + 2w &= 1 && /-1 \\ 2w &= 0 && /:2 \\ \underline{\underline{w}} &= \underline{\underline{0}} \end{aligned}$$

7.  $31 + 5z = 5 + 7z + 12$  / zusammenfassen  
 $31 + 5z = 17 + 7z$  /-5z  
 $31 = 17 + 2z$  /-17  
 $14 = 2z$  /:2  
 $7 = z$

8.  $18 + 18y = 58 + 8y - 20$  / zusammenfassen  
 $18 + 18y = 38 + 8y$  /-8y  
 $18 + 10y = 38$  /-18  
 $10y = 20$  /:10  
 $y = 2$

9.  $6z + 7 + 2z - 11 = 56 + 4z$  / zusammenfassen  
 $8z - 4 = 56 + 4z$  /-4z  
 $4z - 4 = 56$  /+4  
 $4z = 60$  /:4  
 $z = 15$

10.  $9s - 4s + 13 = 145 - s + 18$  / zusammenfassen  
 $5s + 13 = 163 - s$  /+s  
 $6s + 13 = 163$  /-13  
 $6s = 150$  /:6  
 $s = 25$

11.  $25y - 12 - 9y = 24 + 24y - 10 - 10y$  / zusammenfassen  
 $16y - 12 = 14y + 14$  /-14y  
 $2y - 12 = 14$  /+12  
 $2y = 26$  /:2  
 $y = 13$

$$\begin{array}{lll}
 12. & 9x = 13 + 6x - 13 & / \text{ zusammenfassen} \\
 & 9x = 6x & / -6x \\
 & 3x = 0 & / :3 \\
 & \underline{\underline{x = 0}} &
 \end{array}$$

$$\begin{array}{lll}
 13. & 3y - 6 = 4y - 12 & / -3y \\
 & -6 = y - 12 & / +12 \\
 & \underline{\underline{6 = y}} &
 \end{array}$$

$$\begin{array}{lll}
 14. & 5e + 7e - 9 - e = 84 - 4e & / \text{ zusammenfassen} \\
 & 11e - 9 = 84 - 4e & / +4e \\
 & 15e - 9 = 84 & / +9 \\
 & 15e = 93 & / :15 \\
 & e = \frac{93}{15} & \\
 & e = \frac{31}{5} &
 \end{array}$$