

## Lineare Gleichungen 1

Lösen Sie folgende Gleichungen; führen Sie die Probe durch

1.  $4x = 12$
2.  $3x = 9$
3.  $-5x = 12$
4.  $\frac{1}{2}x = 5$
5.  $2x = -18$
6.  $\frac{1}{4}x = 12$
7.  $\frac{3}{4}x = 33$
8.  $7x = -49$
9.  $6x = 0$
10.  $\frac{1}{3}x = 0$
11.  $x + 5 = 7$
12.  $x - 4 = 5$
13.  $x + 17 = 3$
14.  $x - 5 = -3$
15.  $x - 4 = -4$
16.  $x - 4 = 4$
17.  $x + 4 = 4$
18.  $x + 4 = -4$
19.  $-9 + x = 7$
20.  $9 + x = -7$

## Lineare Gleichungen 1

1.

$$\begin{aligned} 4x &= 12 & | : 4 \\ \Leftrightarrow x &= 3 \\ \text{Probe: } 3 * 4 &= 12 \end{aligned}$$

2.

$$\begin{aligned} 3x &= 9 & | : 3 \\ \Leftrightarrow x &= 3 \\ \text{Probe: } 3 * 3 &= 9 \end{aligned}$$

3.

$$\begin{aligned} -5x &= 12 & | : (-5) \\ \Leftrightarrow x &= -\frac{12}{5} = -2,2 \\ \text{Probe: } -5 * \frac{12}{5} &= 12 \end{aligned}$$

4.

$$\begin{aligned} \frac{1}{2}x &= 5 & | * 2 \\ \Leftrightarrow x &= 10 \\ \text{Probe: } \frac{1}{2} * 10 &= 5 \end{aligned}$$

5.

$$\begin{aligned} 2x &= -18 & | : 2 \\ \Leftrightarrow x &= -9 \\ \text{Probe: } 2 * (-9) &= -18 \end{aligned}$$

6.

$$\begin{aligned} \frac{1}{4}x &= 12 & | * 4 \\ \Leftrightarrow x &= 48 \\ \text{Probe: } \frac{1}{4} * 48 &= 12 \end{aligned}$$

7.

$$\begin{aligned} \frac{3}{4}x &= 33 & | * \frac{4}{3} \\ \Leftrightarrow x &= 44 \\ \text{Probe: } \frac{3}{4} * 44 &= 33 \end{aligned}$$

8.

$$\begin{aligned} 7x &= -49 & | : 7 \\ \Leftrightarrow x &= -7 \\ \text{Probe: } 7 * (-7) &= -49 \end{aligned}$$

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9.

$$6x = 0 \quad | : 6$$
$$\Leftrightarrow x = 0$$

Probe:  $6 * 0 = 0$

10.

$$\frac{1}{3}x = 0 \quad | * 3$$
$$\Leftrightarrow x = 0$$

Probe:  $\frac{1}{3} * 0 = 0$

11.

$$x + 5 = 7 \quad | - 5$$
$$\Leftrightarrow x = 2$$

Probe:  $2 + 5 = 7$

12.

$$x - 4 = 5 \quad | + 4$$
$$\Leftrightarrow x = 9$$

Probe:  $9 - 4 = 5$

13.

$$x + 17 = 3 \quad | - 17$$
$$\Leftrightarrow x = -14$$

Probe:  $-14 + 17 = 3$

14.

$$x - 5 = -3 \quad | + 5$$
$$\Leftrightarrow x = 2$$

Probe:  $2 - 5 = -3$

15.

$$x - 4 = -4 \quad | + 4$$
$$\Leftrightarrow x = 0$$

Probe:  $0 - 4 = -4$

16.

$$x - 4 = 4 \quad | + 4$$
$$\Leftrightarrow x = 8$$

Probe:  $8 - 4 = 4$

17.

$$x + 4 = 4 \quad | - 4$$
$$\Leftrightarrow x = 0$$

Probe:  $0 + 4 = 4$

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18.

$$\begin{aligned} x + 4 &= -4 & | -4 \\ \Leftrightarrow x &= -8 \\ \text{Probe: } -8 + 4 &= -4 \end{aligned}$$

19.

$$\begin{aligned} -9 + x &= 7 & | +9 \\ \Leftrightarrow x &= 16 \\ \text{Probe: } -9 + 16 &= 7 \end{aligned}$$

20.

$$\begin{aligned} 9 + x &= 7 & | -9 \\ \Leftrightarrow x &= -2 \\ \text{Probe: } 9 - 2 &= 7 \end{aligned}$$