Datum: 08.06.2023

# Tägliche Übungen

| | | | |
|---|---|---|---|
| a) | $x = -9 \rightarrow 2 \cdot x - 2 \cdot x = ?$ | b) | $b = 2 \rightarrow 5 \cdot b - 3 = ?$ |
| c) | $z = -5 \rightarrow z + 3 = ?$ | d) | $a = -1 \rightarrow 4 \cdot a + 1 = ?$ |
| e) | $3 \cdot y - 13 = 14$ | f) | $4 \cdot b - 18 = 30$ |
| g) | $2 \cdot b - 6 = 14$ | h) | $7 \cdot x - 15 = 41$ |
| i) | $10 \cdot x - 12 = 28$ | j) | $5 \cdot y - 5 = 5$ |
| k) | $9 \cdot y - 13 = 41$ | l) | $7 \cdot a - 8 = 76$ |
| m) | $6 \cdot a - 3 = 51$ | n) | $8 \cdot y - 16 = 32$ |
| o) | $6 \cdot b - 14 = 4$ | p) | $4 \cdot b - 4 = 20$ |
| q) | $6 \cdot y - 20 = 52$ | r) | $8 \cdot a - 13 = 83$ |
| s) | $10 \cdot y - 15 = 75$ | t) | $5 \cdot b - 7 = 48$ |
| u) | $3 \cdot a - 18 = -3$ | v) | $4 \cdot b - 6 = 14$ |
| w) | $10 \cdot y - 12 = 88$ | x) | $6 \cdot a - 3 = 69$ |
| y) | $7 \cdot x - 6 = 36$ | z) | $4 \cdot y - 17 = 31$ |

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# Lösungen Tägliche Übungen

a)

$$\begin{aligned} x &= -9 \rightarrow \\ 2 \cdot x - 2 \cdot x &= 2 \cdot (-9) - 2 \cdot (-9) = 0 \end{aligned}$$

b)

$$\begin{aligned} b &= 2 \rightarrow \\ 5 \cdot b - 3 &= 5 \cdot 2 - 3 = 7 \end{aligned}$$

c)

$$\begin{aligned} z &= -5 \rightarrow \\ z + 3 &= (-5) + 3 = -2 \end{aligned}$$

d)

$$\begin{aligned} a &= -1 \rightarrow \\ 4 \cdot a + 1 &= 4 \cdot (-1) + 1 = -3 \end{aligned}$$

e)

$$\begin{aligned} 3 \cdot y - 13 &= 14 \\ 3 \cdot y - 13 &= 14 \quad \mid +13 \\ 3 \cdot y &= 27 \quad \mid : (3) \\ y &= 9 \end{aligned}$$

Probe:

$$\begin{aligned} 3 \cdot y - 13 &= 14 \\ 3 \cdot (9) - 13 &= 14 \\ 27 - 13 &= 14 \\ 14 &= 14 \end{aligned}$$

f)

$$\begin{aligned} 4 \cdot b - 18 &= 30 \\ 4 \cdot b - 18 &= 30 \quad \mid +18 \\ 4 \cdot b &= 48 \quad \mid : (4) \\ b &= 12 \end{aligned}$$

Probe:

$$\begin{aligned} 4 \cdot b - 18 &= 30 \\ 4 \cdot (12) - 18 &= 30 \\ 48 - 18 &= 30 \\ 30 &= 30 \end{aligned}$$

g)

$$\begin{aligned} 2 \cdot b - 6 &= 14 \\ 2 \cdot b - 6 &= 14 \quad \mid +6 \\ 2 \cdot b &= 20 \quad \mid : (2) \\ b &= 10 \end{aligned}$$

Probe:

$$\begin{aligned} 2 \cdot b - 6 &= 14 \\ 2 \cdot (10) - 6 &= 14 \\ 20 - 6 &= 14 \\ 14 &= 14 \end{aligned}$$

h)

$$\begin{aligned} 7 \cdot x - 15 &= 41 \\ 7 \cdot x - 15 &= 41 \quad \mid +15 \\ 7 \cdot x &= 56 \quad \mid : (7) \\ x &= 8 \end{aligned}$$

Probe:

$$\begin{aligned} 7 \cdot x - 15 &= 41 \\ 7 \cdot (8) - 15 &= 41 \\ 56 - 15 &= 41 \\ 41 &= 41 \end{aligned}$$

i)

$$\begin{aligned} 10 \cdot x - 12 &= 28 \\ 10 \cdot x - 12 &= 28 \quad \mid +12 \\ 10 \cdot x &= 40 \quad \mid : (10) \\ x &= 4 \end{aligned}$$

Probe:

$$\begin{aligned} 10 \cdot x - 12 &= 28 \\ 10 \cdot (4) - 12 &= 28 \\ 40 - 12 &= 28 \\ 28 &= 28 \end{aligned}$$

j)

$$\begin{aligned} 5 \cdot y - 5 &= 5 \\ 5 \cdot y - 5 &= 5 \quad \mid +5 \\ 5 \cdot y &= 10 \quad \mid : (5) \\ y &= 2 \end{aligned}$$

Probe:

$$\begin{aligned} 5 \cdot y - 5 &= 5 \\ 5 \cdot (2) - 5 &= 5 \\ 10 - 5 &= 5 \\ 5 &= 5 \end{aligned}$$

k)

$$\begin{aligned} 9 \cdot y - 13 &= 41 \\ 9 \cdot y - 13 &= 41 \quad | +13 \\ 9 \cdot y &= 54 \quad |: (9) \\ y &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 9 \cdot y - 13 &= 41 \\ 9 \cdot (6) - 13 &= 41 \\ 54 - 13 &= 41 \\ 41 &= 41 \end{aligned}$$

l)

$$\begin{aligned} 7 \cdot a - 8 &= 76 \\ 7 \cdot a - 8 &= 76 \quad | +8 \\ 7 \cdot a &= 84 \quad |: (7) \\ a &= 12 \end{aligned}$$

Probe:
$$\begin{aligned} 7 \cdot a - 8 &= 76 \\ 7 \cdot (12) - 8 &= 76 \\ 84 - 8 &= 76 \\ 76 &= 76 \end{aligned}$$

m)

$$\begin{aligned} 6 \cdot a - 3 &= 51 \\ 6 \cdot a - 3 &= 51 \quad | +3 \\ 6 \cdot a &= 54 \quad |: (6) \\ a &= 9 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot a - 3 &= 51 \\ 6 \cdot (9) - 3 &= 51 \\ 54 - 3 &= 51 \\ 51 &= 51 \end{aligned}$$

n)

$$\begin{aligned} 8 \cdot y - 16 &= 32 \\ 8 \cdot y - 16 &= 32 \quad | +16 \\ 8 \cdot y &= 48 \quad |: (8) \\ y &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 8 \cdot y - 16 &= 32 \\ 8 \cdot (6) - 16 &= 32 \\ 48 - 16 &= 32 \\ 32 &= 32 \end{aligned}$$

o)

$$\begin{aligned} 6 \cdot b - 14 &= 4 \\ 6 \cdot b - 14 &= 4 \quad | +14 \\ 6 \cdot b &= 18 \quad |: (6) \\ b &= 3 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot b - 14 &= 4 \\ 6 \cdot (3) - 14 &= 4 \\ 18 - 14 &= 4 \\ 4 &= 4 \end{aligned}$$

p)

$$\begin{aligned} 4 \cdot b - 4 &= 20 \\ 4 \cdot b - 4 &= 20 \quad | +4 \\ 4 \cdot b &= 24 \quad |: (4) \\ b &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 4 \cdot b - 4 &= 20 \\ 4 \cdot (6) - 4 &= 20 \\ 24 - 4 &= 20 \\ 20 &= 20 \end{aligned}$$

q)

$$\begin{aligned} 6 \cdot y - 20 &= 52 \\ 6 \cdot y - 20 &= 52 \quad | +20 \\ 6 \cdot y &= 72 \quad |: (6) \\ y &= 12 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot y - 20 &= 52 \\ 6 \cdot (12) - 20 &= 52 \\ 72 - 20 &= 52 \\ 52 &= 52 \end{aligned}$$

r)

$$\begin{aligned} 8 \cdot a - 13 &= 83 \\ 8 \cdot a - 13 &= 83 \quad | +13 \\ 8 \cdot a &= 96 \quad |: (8) \\ a &= 12 \end{aligned}$$

Probe:
$$\begin{aligned} 8 \cdot a - 13 &= 83 \\ 8 \cdot (12) - 13 &= 83 \\ 96 - 13 &= 83 \\ 83 &= 83 \end{aligned}$$

s)

$$\begin{aligned} 10 \cdot y - 15 &= 75 \\ 10 \cdot y - 15 &= 75 \quad | +15 \\ 10 \cdot y &= 90 \quad |: (10) \\ y &= 9 \end{aligned}$$

Probe:
$$\begin{aligned} 10 \cdot y - 15 &= 75 \\ 10 \cdot (9) - 15 &= 75 \\ 90 - 15 &= 75 \\ 75 &= 75 \end{aligned}$$

t)

$$\begin{aligned} 5 \cdot b - 7 &= 48 \\ 5 \cdot b - 7 &= 48 \quad | +7 \\ 5 \cdot b &= 55 \quad |: (5) \\ b &= 11 \end{aligned}$$

Probe:
$$\begin{aligned} 5 \cdot b - 7 &= 48 \\ 5 \cdot (11) - 7 &= 48 \\ 55 - 7 &= 48 \\ 48 &= 48 \end{aligned}$$

u)

$$\begin{aligned} 3 \cdot a - 18 &= -3 \\ 3 \cdot a - 18 &= -3 \quad | +18 \\ 3 \cdot a &= 15 \quad |: (3) \\ a &= 5 \end{aligned}$$

Probe:
$$\begin{aligned} 3 \cdot a - 18 &= -3 \\ 3 \cdot (5) - 18 &= -3 \\ 15 - 18 &= -3 \\ -3 &= -3 \end{aligned}$$

v)

$$\begin{aligned} 4 \cdot b - 6 &= 14 \\ 4 \cdot b - 6 &= 14 \quad | +6 \\ 4 \cdot b &= 20 \quad |: (4) \\ b &= 5 \end{aligned}$$

Probe:
$$\begin{aligned} 4 \cdot b - 6 &= 14 \\ 4 \cdot (5) - 6 &= 14 \\ 20 - 6 &= 14 \\ 14 &= 14 \end{aligned}$$

w)

$$\begin{aligned} 10 \cdot y - 12 &= 88 \\ 10 \cdot y - 12 &= 88 \quad | +12 \\ 10 \cdot y &= 100 \quad |: (10) \\ y &= 10 \end{aligned}$$

Probe:
$$\begin{aligned} 10 \cdot y - 12 &= 88 \\ 10 \cdot (10) - 12 &= 88 \\ 100 - 12 &= 88 \\ 88 &= 88 \end{aligned}$$

x)

$$\begin{aligned} 6 \cdot a - 3 &= 69 \\ 6 \cdot a - 3 &= 69 \quad | +3 \\ 6 \cdot a &= 72 \quad |: (6) \\ a &= 12 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot a - 3 &= 69 \\ 6 \cdot (12) - 3 &= 69 \\ 72 - 3 &= 69 \\ 69 &= 69 \end{aligned}$$

y)

$$\begin{aligned} 7 \cdot x - 6 &= 36 \\ 7 \cdot x - 6 &= 36 \quad | +6 \\ 7 \cdot x &= 42 \quad |: (7) \\ x &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 7 \cdot x - 6 &= 36 \\ 7 \cdot (6) - 6 &= 36 \\ 42 - 6 &= 36 \\ 36 &= 36 \end{aligned}$$

z)

$$\begin{aligned} 4 \cdot y - 17 &= 31 \\ 4 \cdot y - 17 &= 31 \quad | +17 \\ 4 \cdot y &= 48 \quad |: (4) \\ y &= 12 \end{aligned}$$

Probe:
$$\begin{aligned} 4 \cdot y - 17 &= 31 \\ 4 \cdot (12) - 17 &= 31 \\ 48 - 17 &= 31 \\ 31 &= 31 \end{aligned}$$