Datum: 08.06.2023

Tägliche Übungen

a)	$z = 7 \rightarrow 4 + 3 \cdot z = ?$	b)	$x = -7 \rightarrow x - 4 = ?$
c)	$a = -12 \rightarrow 4 \cdot a + 2 = ?$	d)	$a = 8 \rightarrow 3 + a = ?$
e)	$6 \cdot a - 17 = 19$	f)	$6 \cdot b - 19 = 41$
g)	$5 \cdot b - 6 = 14$	h)	$8 \cdot a - 9 = 23$
i)	$3 \cdot a - 8 = 28$	j)	$7 \cdot x - 8 = 48$
k)	$7 \cdot x - 4 = 38$	l)	$8 \cdot y - 3 = 61$
m)	$3 \cdot x - 19 = -7$	n)	$2 \cdot x - 2 = 10$
o)	$3 \cdot y - 12 = 15$	p)	$6 \cdot b - 18 = 6$
q)	$8 \cdot a - 14 = 50$	r)	$8 \cdot x - 20 = 44$
s)	$10 \cdot b - 15 = 25$	t)	$3 \cdot b - 18 = 0$
u)	$2 \cdot x - 9 = 9$	v)	$9 \cdot x - 7 = 74$
w)	$5 \cdot x - 6 = 44$	x)	$4 \cdot x - 4 = 8$
y)	$6 \cdot a - 15 = 15$	z)	$3 \cdot b - 10 = 8$

Datum: 08.06.2023

Lösungen Tägliche Übungen

a)

$z = 7 \rightarrow$

$4 + 3 \cdot z = 4 + 3 \cdot 7 = 25$

b)

$x = -7 \rightarrow$

$x - 4 = (-7) - 4 = -11$

c)

$a = -12 \rightarrow$

$4 \cdot a + 2 = 4 \cdot (-12) + 2 = -46$

d)

$a = 8 \rightarrow$

$3 + a = 3 + 8 = 11$

e)

$$\begin{aligned} 6 \cdot a - 17 &= 19 \\ 6 \cdot a - 17 &= 19 \quad | +17 \\ 6 \cdot a &= 36 \quad |: (6) \\ a &= 6 \end{aligned}$$

Probe:

$$\begin{aligned} 6 \cdot a - 17 &= 19 \\ 6 \cdot (6) - 17 &= 19 \\ 36 - 17 &= 19 \\ 19 &= 19 \end{aligned}$$

f)

$$\begin{aligned} 6 \cdot b - 19 &= 41 \\ 6 \cdot b - 19 &= 41 \quad | +19 \\ 6 \cdot b &= 60 \quad |: (6) \\ b &= 10 \end{aligned}$$

Probe:

$$\begin{aligned} 6 \cdot b - 19 &= 41 \\ 6 \cdot (10) - 19 &= 41 \\ 60 - 19 &= 41 \\ 41 &= 41 \end{aligned}$$

g)

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

Probe:

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

h)

$$\begin{aligned} 8 \cdot a - 9 &= 23 \\ 8 \cdot a - 9 &= 23 \quad | +9 \\ 8 \cdot a &= 32 \quad |: (8) \\ a &= 4 \end{aligned}$$

Probe:

$$\begin{aligned} 8 \cdot a - 9 &= 23 \\ 8 \cdot (4) - 9 &= 23 \\ 32 - 9 &= 23 \\ 23 &= 23 \end{aligned}$$

i)

$$\begin{aligned} 3 \cdot a - 8 &= 28 \\ 3 \cdot a - 8 &= 28 \quad | +8 \\ 3 \cdot a &= 36 \quad |: (3) \\ a &= 12 \end{aligned}$$

Probe:

$$\begin{aligned} 3 \cdot a - 8 &= 28 \\ 3 \cdot (12) - 8 &= 28 \\ 36 - 8 &= 28 \\ 28 &= 28 \end{aligned}$$

j)

$$\begin{aligned} 7 \cdot x - 8 &= 48 \\ 7 \cdot x - 8 &= 48 \quad | +8 \\ 7 \cdot x &= 56 \quad |: (7) \\ x &= 8 \end{aligned}$$

Probe:

$$\begin{aligned} 7 \cdot x - 8 &= 48 \\ 7 \cdot (8) - 8 &= 48 \\ 56 - 8 &= 48 \\ 48 &= 48 \end{aligned}$$

k)

$$\begin{aligned} 7 \cdot x - 4 &= 38 \\ 7 \cdot x - 4 &= 38 \quad | +4 \\ 7 \cdot x &= 42 \quad |: (7) \\ x &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 7 \cdot x - 4 &= 38 \\ 7 \cdot (6) - 4 &= 38 \\ 42 - 4 &= 38 \\ 38 &= 38 \end{aligned}$$

l)

$$\begin{aligned} 8 \cdot y - 3 &= 61 \\ 8 \cdot y - 3 &= 61 \quad | +3 \\ 8 \cdot y &= 64 \quad |: (8) \\ y &= 8 \end{aligned}$$

Probe:
$$\begin{aligned} 8 \cdot y - 3 &= 61 \\ 8 \cdot (8) - 3 &= 61 \\ 64 - 3 &= 61 \\ 61 &= 61 \end{aligned}$$

m)

$$\begin{aligned} 3 \cdot x - 19 &= -7 \\ 3 \cdot x - 19 &= -7 \quad | +19 \\ 3 \cdot x &= 12 \quad |: (3) \\ x &= 4 \end{aligned}$$

Probe:
$$\begin{aligned} 3 \cdot x - 19 &= -7 \\ 3 \cdot (4) - 19 &= -7 \\ 12 - 19 &= -7 \\ -7 &= -7 \end{aligned}$$

n)

$$\begin{aligned} 2 \cdot x - 2 &= 10 \\ 2 \cdot x - 2 &= 10 \quad | +2 \\ 2 \cdot x &= 12 \quad |: (2) \\ x &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 2 \cdot x - 2 &= 10 \\ 2 \cdot (6) - 2 &= 10 \\ 12 - 2 &= 10 \\ 10 &= 10 \end{aligned}$$

o)

$$\begin{aligned} 3 \cdot y - 12 &= 15 \\ 3 \cdot y - 12 &= 15 \quad | +12 \\ 3 \cdot y &= 27 \quad |: (3) \\ y &= 9 \end{aligned}$$

Probe:
$$\begin{aligned} 3 \cdot y - 12 &= 15 \\ 3 \cdot (9) - 12 &= 15 \\ 27 - 12 &= 15 \\ 15 &= 15 \end{aligned}$$

p)

$$\begin{aligned} 6 \cdot b - 18 &= 6 \\ 6 \cdot b - 18 &= 6 \quad | +18 \\ 6 \cdot b &= 24 \quad |: (6) \\ b &= 4 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot b - 18 &= 6 \\ 6 \cdot (4) - 18 &= 6 \\ 24 - 18 &= 6 \\ 6 &= 6 \end{aligned}$$

q)

$$\begin{aligned} 8 \cdot a - 14 &= 50 \\ 8 \cdot a - 14 &= 50 \quad | +14 \\ 8 \cdot a &= 64 \quad |: (8) \\ a &= 8 \end{aligned}$$

Probe:
$$\begin{aligned} 8 \cdot a - 14 &= 50 \\ 8 \cdot (8) - 14 &= 50 \\ 64 - 14 &= 50 \\ 50 &= 50 \end{aligned}$$

r)

$$\begin{aligned} 8 \cdot x - 20 &= 44 \\ 8 \cdot x - 20 &= 44 \quad | +20 \\ 8 \cdot x &= 64 \quad |: (8) \\ x &= 8 \end{aligned}$$

Probe:
$$\begin{aligned} 8 \cdot x - 20 &= 44 \\ 8 \cdot (8) - 20 &= 44 \\ 64 - 20 &= 44 \\ 44 &= 44 \end{aligned}$$

s)

$$\begin{aligned} 10 \cdot b - 15 &= 25 \\ 10 \cdot b - 15 &= 25 \quad | +15 \\ 10 \cdot b &= 40 \quad |: (10) \\ b &= 4 \end{aligned}$$

Probe:
$$\begin{aligned} 10 \cdot b - 15 &= 25 \\ 10 \cdot (4) - 15 &= 25 \\ 40 - 15 &= 25 \\ 25 &= 25 \end{aligned}$$

t)

$$\begin{aligned} 3 \cdot b - 18 &= 0 \\ 3 \cdot b - 18 &= 0 \quad | +18 \\ 3 \cdot b &= 18 \quad |: (3) \\ b &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 3 \cdot b - 18 &= 0 \\ 3 \cdot (6) - 18 &= 0 \\ 18 - 18 &= 0 \\ 0 &= 0 \end{aligned}$$

u)

$$\begin{aligned} 2 \cdot x - 9 &= 9 \\ 2 \cdot x - 9 &= 9 \quad | +9 \\ 2 \cdot x &= 18 \quad |: (2) \\ x &= 9 \end{aligned}$$

Probe:
$$\begin{aligned} 2 \cdot x - 9 &= 9 \\ 2 \cdot (9) - 9 &= 9 \\ 18 - 9 &= 9 \\ 9 &= 9 \end{aligned}$$

v)

$$\begin{aligned} 9 \cdot x - 7 &= 74 \\ 9 \cdot x - 7 &= 74 \quad | +7 \\ 9 \cdot x &= 81 \quad |: (9) \\ x &= 9 \end{aligned}$$

Probe:
$$\begin{aligned} 9 \cdot x - 7 &= 74 \\ 9 \cdot (9) - 7 &= 74 \\ 81 - 7 &= 74 \\ 74 &= 74 \end{aligned}$$

w)

$$\begin{aligned} 5 \cdot x - 6 &= 44 \\ 5 \cdot x - 6 &= 44 \quad | +6 \\ 5 \cdot x &= 50 \quad |: (5) \\ x &= 10 \end{aligned}$$

Probe:
$$\begin{aligned} 5 \cdot x - 6 &= 44 \\ 5 \cdot (10) - 6 &= 44 \\ 50 - 6 &= 44 \\ 44 &= 44 \end{aligned}$$

x)

$$\begin{aligned} 4 \cdot x - 4 &= 8 \\ 4 \cdot x - 4 &= 8 \quad | +4 \\ 4 \cdot x &= 12 \quad |: (4) \\ x &= 3 \end{aligned}$$

Probe:
$$\begin{aligned} 4 \cdot x - 4 &= 8 \\ 4 \cdot (3) - 4 &= 8 \\ 12 - 4 &= 8 \\ 8 &= 8 \end{aligned}$$

y)

$$\begin{aligned} 6 \cdot a - 15 &= 15 \\ 6 \cdot a - 15 &= 15 \quad | +15 \\ 6 \cdot a &= 30 \quad |: (6) \\ a &= 5 \end{aligned}$$

Probe:
$$\begin{aligned} 6 \cdot a - 15 &= 15 \\ 6 \cdot (5) - 15 &= 15 \\ 30 - 15 &= 15 \\ 15 &= 15 \end{aligned}$$

z)

$$\begin{aligned} 3 \cdot b - 10 &= 8 \\ 3 \cdot b - 10 &= 8 \quad | +10 \\ 3 \cdot b &= 18 \quad |: (3) \\ b &= 6 \end{aligned}$$

Probe:
$$\begin{aligned} 3 \cdot b - 10 &= 8 \\ 3 \cdot (6) - 10 &= 8 \\ 18 - 10 &= 8 \\ 8 &= 8 \end{aligned}$$