

Grundrechnungsarten

1.

$$\begin{aligned} \text{a) } 5 \cdot 12 + 4 \cdot 25 &= \\ (5 \cdot 12 + 4) \cdot 25 &= \\ 5 \cdot (12 + 4) \cdot 25 &= \\ 5 \cdot (12 + 4 \cdot 25) &= \end{aligned}$$

$$\begin{aligned} \text{b) } 240 : 20 - 5 \cdot 2 &= \\ 240 : (20 - 5) \cdot 2 &= \\ 240 : (20 - 5 \cdot 2) &= \\ (240 : 20 - 5) \cdot 2 &= \end{aligned}$$

$$\begin{aligned} \text{c) } 20 \cdot 8 + 32 : 16 - 12 \cdot 5 &= \\ 20 \cdot (8 + 32) : (16 - 12) \cdot 5 &= \\ 20 \cdot (8 + 32 : 16) - 12 \cdot 5 &= \\ (20 \cdot 8 + 32) : (16 - 12) \cdot 5 &= \\ 20 \cdot [8 + 32 : (16 - 12)] \cdot 5 &= \\ [(20 \cdot 8 + 32) : 16 - 12] \cdot 5 &= \end{aligned}$$

2.

$$\begin{aligned} \text{a) } 4 + 5 \cdot 3^2 &= \\ (4 + 5) \cdot 3^2 &= \\ 4 + (5 \cdot 3)^2 &= \\ (4 + 5 \cdot 3)^2 &= \\ [(4 + 5) \cdot 3]^2 &= \end{aligned}$$

$$\begin{aligned} \text{c) } 3^3 - 2^3 + 4^2 &= \\ (3 - 2)^3 + 4^2 &= \\ 3^3 - (4 - 2)^3 &= \\ (3^2 - 2^2)^3 &= \\ (3^3 - 2^3)^2 &= \end{aligned}$$

$$\begin{aligned} \text{b) } 2 \cdot 3 - 1^2 &= \\ 2 \cdot (3 - 1)^2 &= \\ 2 \cdot (3 - 1^2) &= \\ (2 \cdot 3 - 1)^2 &= \\ [2 \cdot (3 - 1)]^2 &= \end{aligned}$$

$$\begin{aligned} \text{3. } (+6) \cdot (-4) + (+4) \cdot (+10) - (+2) \cdot (-5) &= \\ (-6) \cdot (-4) - (+4) \cdot (-10) + (-2) \cdot (-5) &= \\ [(+6) \cdot (-4) + (+4)] \cdot (+10) - (+2) \cdot (-5) &= \\ (+6) \cdot [(+4) + (-4) \cdot (-10)] - (-2) \cdot (-5) &= \\ (-6) \cdot (+4) + (-4) \cdot [(+10) + (+2) \cdot (-5)] &= \\ [(-6) \cdot (-4) - (+4)] \cdot [(-10) + (+2)] \cdot (+5) &= \end{aligned}$$

$$\begin{aligned} \text{4. } 2^3 - (-2)^3 &= \\ (-5)^3 + (-5)^2 &= \\ -3^3 - (-3)^2 &= \\ (+1) - (-2) \cdot (-1)^4 &= \\ (+1) - [(-2) \cdot (-1)]^4 &= \\ [(+1) - (-2) \cdot (-1)]^4 &= \end{aligned}$$

Ergebnisse:

1.	a) 160	1600	2000	560		
	b) 2	32	24	14		
	c) 102	1000	140	240	1600	0
2.	a) 49	81	229	361	729	
	b) 5	8	4	25	16	
	c) 35	17	19	125	361	
3.	26	74	-190	254	-24	-800
4.	16	-100	-36	3	-15	1