

$$-(a - (b + c - (5 - (a + 3)))) =$$

$$-(a - (b + c - (5 - a - 3))) =$$

$$-(a - (b + c - 5 + a + 3)) =$$

$$-(a - b - c + 5 - a - 3) =$$

$$-a + b + c - 5 + a + 3 =$$

$$b + c - 2$$

$$-\left(a - (b + c - (5 - (a + 3)))\right) =$$

$$-a + (b + c - (5 - (a + 3))) =$$

$$-a + b + c - (5 - (a + 3)) =$$

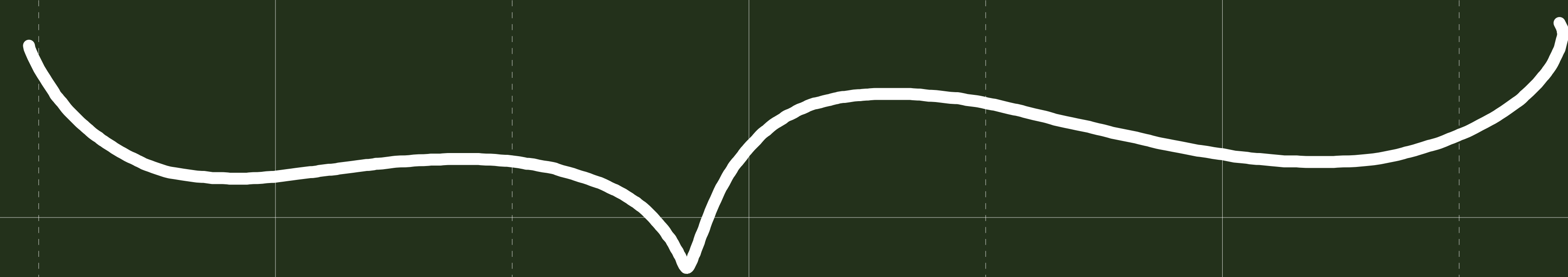
$$-a + b + c - 5 + (a + 3) =$$

$$-a + b + c - 5 + a + 3 =$$

$$\underline{\underline{b + c - 2}}$$

$$8xy + 2x + 16y + 4 =$$

$$2 \cdot (4xy + x + 8y + 2) =$$



Hier geht noch was :-)

$$a \cdot x + b \cdot x + a \cdot y + b \cdot y =$$

$$x \cdot (a+b) + y \cdot (a+b) =$$

$$(a+b) \cdot (x+y)$$

Probe durch
Ausmultiplizieren

$$\begin{aligned} & a \cdot x + a \cdot y + b \cdot x + b \cdot y \\ &= a \cdot x + b \cdot x + a \cdot y + b \cdot y \end{aligned}$$

$$\boxed{p \cdot r + q \cdot r} + \boxed{p \cdot s + q \cdot s} =$$

$$r \cdot (p+q) + s \cdot (p+q) =$$

$$\boxed{(p+q)} \cdot \boxed{r} + \boxed{(p+q)} \cdot \boxed{s} =$$

$$\boxed{(p+q)} \cdot (\boxed{r} + \boxed{s})$$

$$\boxed{a} \cdot (\boxed{b} + \boxed{c})$$

$$= \boxed{a} \cdot \boxed{b} + \boxed{a} \cdot \boxed{c}$$

Distributiv-
gesetz

$$3.4 \quad 24u + 16v = 8 \cdot (3u + 2v)$$

$(2)(2)(2)3 \quad (2)(2)(2)2 \quad \uparrow 2 \cdot 2 \cdot 2$

$$3.1 \quad 3a + 3b = 3 \cdot (a + b)$$

$$3.2 \quad 1 \cdot a + a \cdot b = a \cdot (1 + b)$$

$$3.3 \quad 2x + 6 = 2 \cdot (x + 3)$$

$\uparrow 2 \cdot 3$

$$3.6 \quad \boxed{(x-y)} \cdot p - \boxed{(x-y)} \cdot 1$$

$$= \boxed{(x-y)} \cdot (p-1)$$

$$3.5 \quad p \cdot (a-b) - q \cdot (a-b) = \\ (a-b) \cdot (p-q)$$

Probe: $(a-b) \cdot (p-q) = a \cdot p - a \cdot q - b \cdot p + b \cdot q$

$$p \cdot (a-b) - q \cdot (a-b) = p \cdot a - p \cdot b - q \cdot a + q \cdot b \\ = a \cdot p - a \cdot q - b \cdot p + b \cdot q$$

$$38. \quad a \cdot (c+d) - (c-d) =$$

$$a \cdot (c+d) - (c+d) \cdot 1 =$$
$$(c+d) \cdot (a-1)$$

$$\text{VQ.:} \quad - (c-d)$$
$$= - (c+d)$$

$$37 \quad (x+y) \cdot p - x - y =$$

$$(x+y) \cdot p - (x+y) \cdot 1 =$$

$$(x+y) \cdot (p - 1)$$

3.10

$$8xy + 2x + 16y + 4 =$$

$$2 \cdot (4xy + x + 8y + 2) =$$

$$2 \cdot (x \cdot (4y + 1) + 2 \cdot (4y + 1)) =$$

$$2 \cdot ((4y + 1) \cdot (x + 2)) =$$

$$2 \cdot (4y + 1) \cdot (x + 2) =$$

$$8xy + 2x + 16y + 4 =$$

$$2x \cdot (4y + 1) + 4 \cdot (4y + 1) =$$

$$(4y + 1) \cdot (2x + 4) =$$

$$(4y + 1) \cdot 2 \cdot (x + 2) =$$

$$2 \cdot (4y + 1) \cdot (x + 2)$$

$$3.11 \quad 21b - 6 + 28ab - 8a = \text{NR.}$$

$$3 \cdot (7b - 2) + 4a \cdot (7b - 2) =$$

$$(7b - 2) \cdot (3 + 4a)$$

$$(3 + 4a) = (4a + 3)$$

$$21 = 3 \cdot 7$$

$$6 = 2 \cdot 3$$

$$28 = 4 \cdot 7 = 2 \cdot 2 \cdot 7$$

$$8 = 2 \cdot 2 \cdot 2$$

$$(2 - 7b) \cdot (-4a - 3)$$

$$\parallel (7b - 2) \cdot (4a + 3)$$

$$(7b-2) \cdot (3+4a) =$$

$$(-1) \cdot (2-7b) \cdot (3+4a)$$

$$(2-7b) \cdot (-4a-3)$$

NR.:

$$7b-2$$

$$-(2-7b)$$

$$3.12 \quad 14x^2 - 49xy + 42y^2 =$$

$$7 \cdot (2x^2 - 7xy + 6y^2)$$

$$7 \cdot (\boxed{2}x + \boxed{3}y) \cdot (\boxed{1}x + \boxed{2}y)$$

1	2	2	3
2	3	1	2
-1	-2	-2	-3
-2	-3	-1	-2

$$14 = 2 \cdot 7$$

$$49 = 7 \cdot 7$$

$$42 = 2 \cdot 3 \cdot 7$$

$$2 = 1 \cdot 2$$

$$2 = 2 \cdot 1$$

$$2 = (-1) \cdot (-2)$$

$$2 = (-2) \cdot (-1)$$