

# Verbindung der 4 Grundrechnungsarten

*Lösungsblatt*

1	$(x + 3) \cdot 2y + 4y \cdot (10 - 2x) = 2xy + 6y + 40y - 8xy = -6xy + 46y$
2	$(3x - 5) \cdot 4y - 8x \cdot (4 - 3y) = 12xy - 20y - 32x + 24xy = -32x + 36xy - 20y$
3	$(8a - 10b) : 2 + (10a + 6b) \cdot 3 = 4a - 5b + 30a + 18b = 34a + 13b$
4	$(2 + e) \cdot 3f + 5e \cdot (7 - 2f) = 6f + 3ef + 35e - 10ef = 35e - 7ef + 6f$
5	$(8 - 13e) \cdot 5f - 12f \cdot (7e + 25) = 40f - 65ef - 84ef - 300f = -149ef - 260f$
6	$(24g - 32h) : 4 - (6g + 2h) \cdot 2 = 6g - 8h - 12g - 4h = -6g - 12h$
7	$3x \cdot (y - 7) - 5 \cdot (6x - 3) = 3xy - 21x - 30x + 15 = -51x + 3xy + 15$
8	$25a + 2 \cdot (18b - 15a) = 25a + 36b - 30a = -5a + 36b$
9	$(4x - 5) \cdot (y + 2) - 4x \cdot (y - 1) = 4xy - 5y + 8x - 10 - 4xy + 4x = 12x - 5y - 10$
10	$70u - (9u + 4v) \cdot 5 = 70u - (45u + 20v) = 70u - 45u - 20v = 25u - 20v$
11	$3 \cdot (a + 4b) - 2 \cdot (a - 7b) = 3a + 12b - 2a + 14b = a + 26b$
12	$2ef + 8e - (2e - 7) \cdot (f + 4) = 2ef + 8e - (2ef - 7f + 8e - 28) = 7f + 28$
13	$(k - 2r) \cdot 5 - 3 \cdot (2k - 4r) = 5k - 10r - 6k + 12r = -k + 2r$
14	$5 - 8 \cdot (z - 2) + (5z + 4) \cdot 3 = 5 - 8z + 16 + 15z + 12 = 7z + 33$
15	$(27a + 54b) : (-9) - 2 \cdot (5a - 3b) - 7a = -3a - 6b - 10a + 6b - 7a = -20a$
16	$[5x - (3x - 2)] \cdot [2 \cdot (y - 7)] + 28 = [2x + 2] \cdot [2y - 14] + 28 = 4xy - 28x + 4y$

Lösungen		-5a+36b	D	-6g-12h	U	12x-5y-10	L	34a + 13b	R
35e-7ef+6f	I	25u-20v	I	-6xy+46y	P	-k+2r	A	-51x+3xy+15	N
7z+33	B	-149ef-260f	S	4xy-28x+4y	N	a+26b	S	-32x+36xy-20y	A

1	2	3	4	5
P	A	R	I	S

6	7	8
U	N	D

9	10	11	12	13	14	15	16
L	I	S	S	A	B	O	N