

a) $4.756.393 + 689.342 =$

a)

$$\begin{array}{r} 4.756.393 \\ + 689.342 \\ \hline \oplus 1.111 \\ \hline 5.444.573 \end{array}$$

b) $798.089 + 1.450.792 =$

b)

$$\begin{array}{r} 798.089 \\ + 1.450.792 \\ \hline \oplus 1.111 \\ \hline 2.248.881 \end{array}$$

c) $8.593 + 399.728 =$

c)

$$\begin{array}{r} 8.593 \\ + 399.728 \\ \hline \oplus 1.111 \\ \hline 408.321 \end{array}$$

a) $5.672 - 3.762 =$

a)

$$\begin{array}{r} 5.672 \\ - 3.762 \\ \hline \ominus 1.910 \end{array}$$

b) $8.910.034 - 7.167.287 =$

b)

$$\begin{array}{r} 8.910.034 \\ - 7.167.287 \\ \hline \ominus 1.111 \\ \hline 1.742.747 \end{array}$$

c) $1.267 - 57.389 =$

c)

$$1.267 - 57.389 = -(57.389 - 1.267)$$

$$\begin{array}{r} 57.389 \\ - 1.267 \\ \hline \ominus 56.122 \end{array}$$

$$-(56.122) = -56.122$$

d) $236.789 - 978.225 =$

d)

$$236.789 - 978.225 = -(978.225 - 236.789)$$

$$\begin{array}{r} 978.225 \\ - 236.789 \\ \hline \ominus 1.111 \\ \hline 741.436 \end{array}$$

$$-(741.436) = -741.436$$

a) $125 \cdot 17 =$

a)

$$125 \cdot 17 = 17 \cdot 125$$

	1	7	.	1	2	5	
				1	7	0	0
+				3	4	0	
+					8	5	
⊕				1	1		
	2	.	1	2	5		

b) $287 \cdot 901 =$

b)

	2	8	7	.	9	0	1
				2	5	8	3
+						0	0
+						2	8
⊕							7
	2	5	8	.	5	8	7

	2	.	8	7	0
-			2	8	7
⊖			1	1	
	2	.	5	8	3

c) $1.093,78 \cdot 346,7 =$

c)

$$1.093,78 \cdot 346,7$$

1	0	9	.	3	7	8	.	3	4	6	7
				3	2	8	1	3	4	0	0
+					4	3	7	5	1	2	0
+						6	5	6	2	6	8
+							7	6	5	6	4
⊕					1	2	2	1	1	1	
	3	7	9	.	2	1	3	.	5	2	6

$= 379.213,526$

	1	0	9	3	7	8
+	1	0	9	3	7	8
⊕		1		1	1	
	2	1	8	7	5	6
+	1	0	9	3	7	8
⊕		1	1	1	1	
	3	2	8	1	3	4
+	1	0	9	3	7	8
⊕		1		1	1	
	4	3	7	5	1	2
+	1	0	9	3	7	8
⊕		1			1	
	5	4	6	8	9	0
+	1	0	9	3	7	8
⊕		1	1	1		
	6	5	6	2	6	8
+	1	0	9	3	7	8
⊕		1		1	1	
	7	6	5	6	4	6

a) $10.191 \div 43 =$

a) $10.191 \div 43 = 237$

					2	3	7
1x	43				1	0	1
2x		86					
3x		129					
4x		172					
5x		215					
6x		258					
7x		301					
8x		344					
9x		387					
					0		

b) $130.801 \div 517 =$

b) $130.801 \div 517 = 253$

					2	5	3
517					1	3	0
					1	0	3
					2	7	4
					2	5	8
					1	5	5
					1	5	5
					0		

c) $549 \div 25 =$

c) $549 \div 25 = 21,96$

$$\begin{array}{r} 21,96 \\ 25 \overline{) 549} \\ \underline{50} \\ 49 \\ \underline{25} \\ 240 \\ \underline{225} \\ 150 \\ \underline{150} \\ 0 \end{array}$$

d) $4,6512 \div 1,02 =$

d) $4,6512 \div 1,02 = 4,56$

$$\begin{array}{r} 4,56 \\ 102 \overline{) 465,12} \\ \underline{408} \\ 571 \\ \underline{510} \\ 612 \\ \underline{612} \\ 0 \end{array}$$

a) $24^2 =$

b) $999 \cdot 1001 =$

c) $37^2 =$

d) $211 \cdot 189 =$

$$(24)^2 = (20+4)^2 = 20^2 + 2 \cdot 20 \cdot 4 + 4^2 = 400 + 160 + 16 = 576$$

$$999 \cdot 1001 = (1000-1)(1000+1) = 1000^2 - 1^2 = 1000000 - 1 = 999999$$

$$(37)^2 = (40-3)^2 = 40^2 - 2 \cdot 40 \cdot 3 + 3^2 = 1600 - 240 + 9 = 1369$$

$$211 \cdot 189 = (200+11)(200-11) = 200^2 - 11^2 = 40000 - 121 = 39879$$