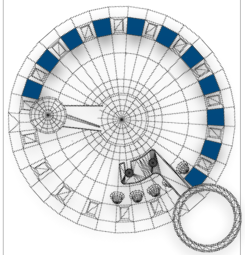
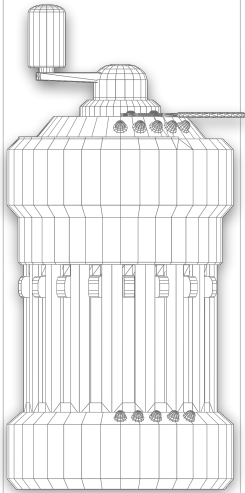


CURTA

ALGORITHMS



A D D I T I O N

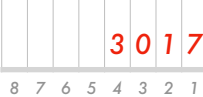

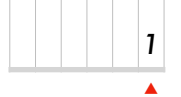
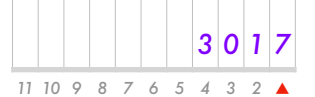

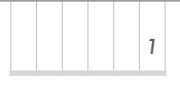
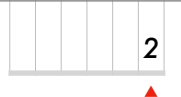
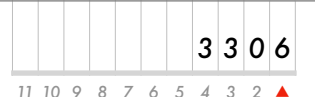




S U B T R A C T I O N

- a **Addition** of whole numbers
- b **Addition** of numbers with decimal places
- c **Addition** of whole numbers when the number to be set exceeds the capacity of SR.
- d **Subtraction** with positive remainder with counting the number of terms subtracted
- e **Subtraction** with negative remainder - 1
- f **Subtraction** with negative remainder - 2

1A

Addition of whole numbers

a

3,017 + 289 + 49,722,800 = ?		Setting	Carriage/Inverter	Turns	Counter	Product
a + b + c		Clear	↑		Clear	Clear
1	Set a Bring it to PR	 8 7 6 5 4 3 2 1	 6 5 4 3 2 1	+	 ▲	 11 10 9 8 7 6 5 4 3 2 ▲
2	Set b Positive turn	 8 7 6 5 4 3 2 1	 1	+	 ▲	 11 10 9 8 7 6 5 4 3 2 ▲
3	Set c Positive turn Result: 49,726,106 In CR, the number of terms added	 8 7 6 5 4 3 2 1	 1	+	 ▲	 11 10 9 8 7 6 5 4 3 2 ▲

Source: " Instructions for use of the Curta ", Contina / Bernard Stabile - 2023

1A
b

Addition of numbers with decimal places

$1,254.05 + 171.4 + 19.075 + 214 = ?$

a + b + c + d

Setting

Carriage/Inverter

Turns

Counter

Product

Clear



Clear

Clear

1

Set a. Set the decimal markers
in accordance with the greatest number of decimal places. (3)
Bring a in PR

1 2 5 4 . 0 5
8 7 6 5 4 3 2 1

6 5 4 3 2 1
▲

+

1
▲

1 2 5 4 . 0 5
11 10 9 8 7 6 5 4 3 2 ▲

2

Set b
Positive turn

1 7 1 . 4
8 7 6 5 4 3 2 1

1
▲

+

2
▲

1 4 2 5 . 4 5
11 10 9 8 7 6 5 4 3 2 ▲

3

Set c
Positive turn

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

1
▲

+

3
▲

1 4 4 4 . 5 2 5
11 10 9 8 7 6 5 4 3 2 ▲

4

Set d
Positive turn
Result: 1,658.525
In CR, the number of terms added

2 1 4 . 0
8 7 6 5 4 3 2 1

1
▲

+

4
▲

1 6 5 8 . 5 2 5
11 10 9 8 7 6 5 4 3 2 ▲

Source: "Instructions for use of the Curta ", Contina / Bernard Stabile - 2023

1A Addition of whole numbers when the number to be set exceeds the capacity of SR with type I

C

		Setting	Carriage/Inverter	Turns	Counter	Product
$72,655,829 + 43,759,681,119 + 5,431,789,854 = ?$		Clear	↑		Clear	Clear
$a + b + c$						
1	Set a Bring it to PR	7 2 6 5 5 8 2 9 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	1 ▲	7 2 6 5 5 8 2 9 11 10 9 8 7 6 5 4 3 2 ▲
2	Set the eight last figures of b in slots 1 to 8 Positive turn	5 9 6 8 1 1 1 9 8 7 6 5 4 3 2 1	1 ▲	+	2 ▲	1 3 2 3 3 6 9 4 8 11 10 9 8 7 6 5 4 3 2 ▲
3	Carriage 4 Set the first three figures of b in slots 6 to 8 Positive turn	4 3 7 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	1 2 ▲	4 3 8 3 2 3 3 6 9 4 8 11 10 9 8 7 6 5 ▲ 3 2 1
4	Carriage 1 Set the eight last figures of c in slots 1 to 8 Positive turn	3 1 7 8 9 8 5 4 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	1 3 ▲	4 3 8 6 4 1 2 6 8 0 2 11 10 9 8 7 6 5 4 3 2 ▲
5	Carriage 4 Set the first two figures of c in slots 6 to 7 Positive turn In CR, the figure 3 is the total number of terms added and the figure 2 shows how many of them had more than eight digits Result: 49,264,126,802	5 4 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	2 3 ▲	4 9 2 6 4 1 2 6 8 0 2 11 10 9 8 7 6 5 ▲ 3 2 1

Source: " Instructions for use of the Curta " , Contina / Bernard Stabile - 2023

1A
d

Subtraction with positive remainder with counting the number of terms subtracted

Begin with inverter down

2,467.75 – 48 – 834.32 – 1,207.5 = ?		Setting	Carriage/Inverter	Turns	Counter	Product
a – b – c – d		Clear	↓		Clear	Clear
1	Inverter down. Set a. Bring it to PR Set the decimal markers The greatest number of decimal places is 2	2 4 6 7.7 5 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	9 9 9 9 9 9 ▲	2 4 6 7.7 5 11 10 9 8 7 6 5 4 3 2 ▲
2					Clear	
3	Set b Negative turn	4 8.0 8 7 6 5 4 3 2 1	1 ▲	-	1 ▲	2 4 1 9.7 5 11 10 9 8 7 6 5 4 3 2 ▲
4	Set c Negative turn	8 3 4.3 2 8 7 6 5 4 3 2 1	1 ▲	-	2 ▲	1 5 8 5.4 3 11 10 9 8 7 6 5 4 3 2 ▲
5	Set d Negative turn Result: 377.93 In CR: the number of terms subtracted	1 2 0 7.5 8 7 6 5 4 3 2 1	1 ▲	-	3 ▲	3 7 7.9 3 11 10 9 8 7 6 5 4 3 2 ▲

Source: "Instructions for use of the Curta ", Contina / Bernard Stabile - 2023

1A
e

Subtraction with negative remainder - 1		Setting	Carriage/Inverter	Turns	Counter	Product
34 - 81 = ?		Clear	↑		Clear	Clear
a - b		Clear	↑		Clear	Clear
1	Set a Bring it to PR	8 7 6 5 4 3 2 1 3 4	6 5 4 3 2 1 1	+	1	11 10 9 8 7 6 5 4 3 2 3 4
2	Set b Negative turn The row of '9' indicates a negative result (underflow). This is the complement of the result	8 7 6 5 4 3 2 1 8 1	1	-		9 9 9 9 9 9 9 9 9 5 3 11 10 9 8 7 6 5 4 3 2
3	Set the two last figures of the result Negative turn	8 7 6 5 4 3 2 1 5 3	1	-	9 9 9 9 9 9	9 9 9 9 9 9 9 9 11 10 9 8 7 6 5 4 3 2
4	Another negative turn gives the result: -47	5 3	1	-	9 9 9 9 9 8	9 9 9 9 9 9 9 9 8 4 7 11 10 9 8 7 6 5 4 3 2

Source: "Instructions for use of the Curta ", Contina / Bernard Stabile - 2023

1A
f

Subtraction with negative remainder - 2

643,781 - 1,274,481 = ?		Setting	Carriage/Inverter	Turns	Counter	Product
a - b		Clear	↑		Clear	Clear
1	Set a Bring it to PR	6 4 3 7 8 1 8 7 6 5 4 3 2 1	6 5 4 3 2 1 ▲	+	1 ▲	6 4 3 7 8 1 11 10 9 8 7 6 5 4 3 2 ▲
2	Set b Negative turn In PR, the complement of the result	1 2 7 4 4 8 1 8 7 6 5 4 3 2 1	1 ▲	-		9 9 9 9 9 3 6 9 3 0 0 11 10 9 8 7 6 5 4 3 2 ▲
3	Set the complement Negative turn	9 9 3 6 9 3 0 0 8 7 6 5 4 3 2 1	1 ▲	-	9 9 9 9 9 9 ▲	11 10 9 8 7 6 5 4 3 2 1
4	Another negative turn Result: -630700	9 9 3 6 9 3 0 0	1 ▲	-	9 9 9 9 9 8 ▲	6 3 0 7 0 0 11 10 9 8 7 6 5 4 3 2 ▲

Source: "Instructions for use of the Curta ", Contina / Bernard Stabile - 2023

1A
f