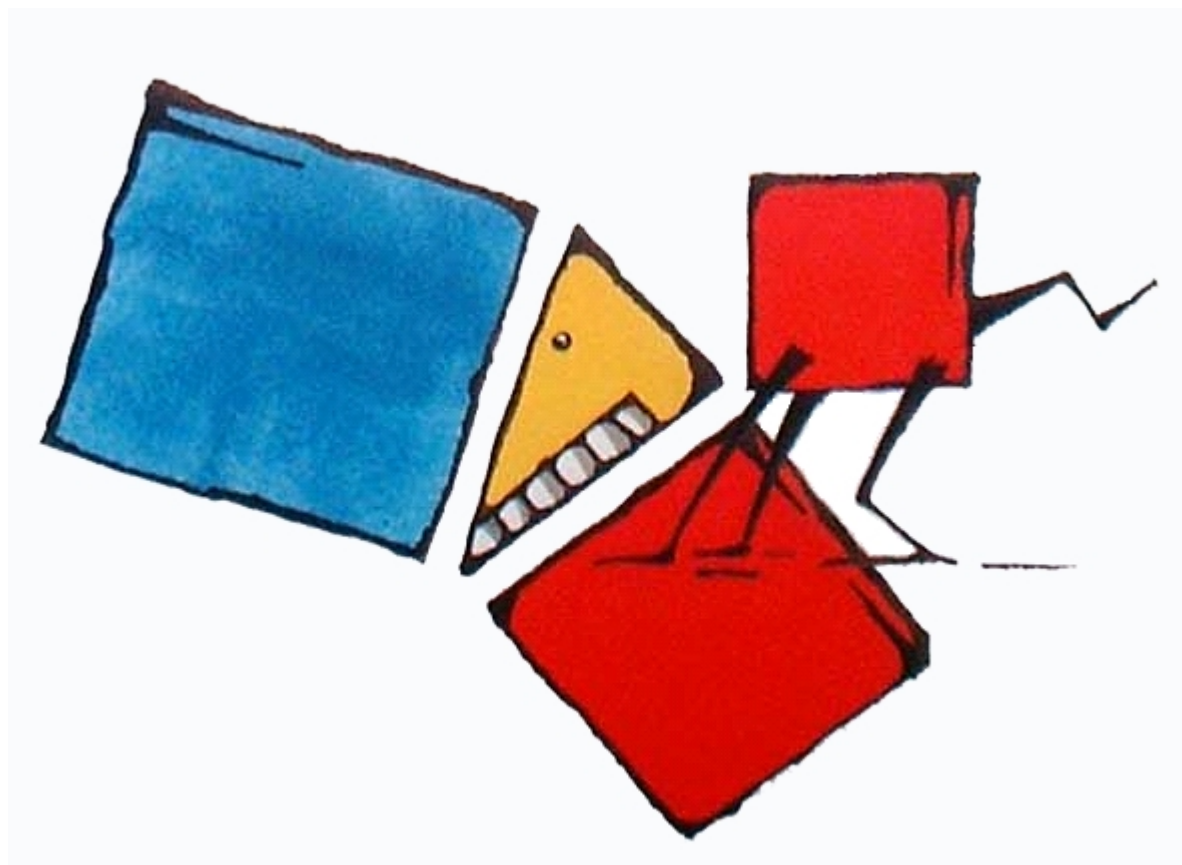




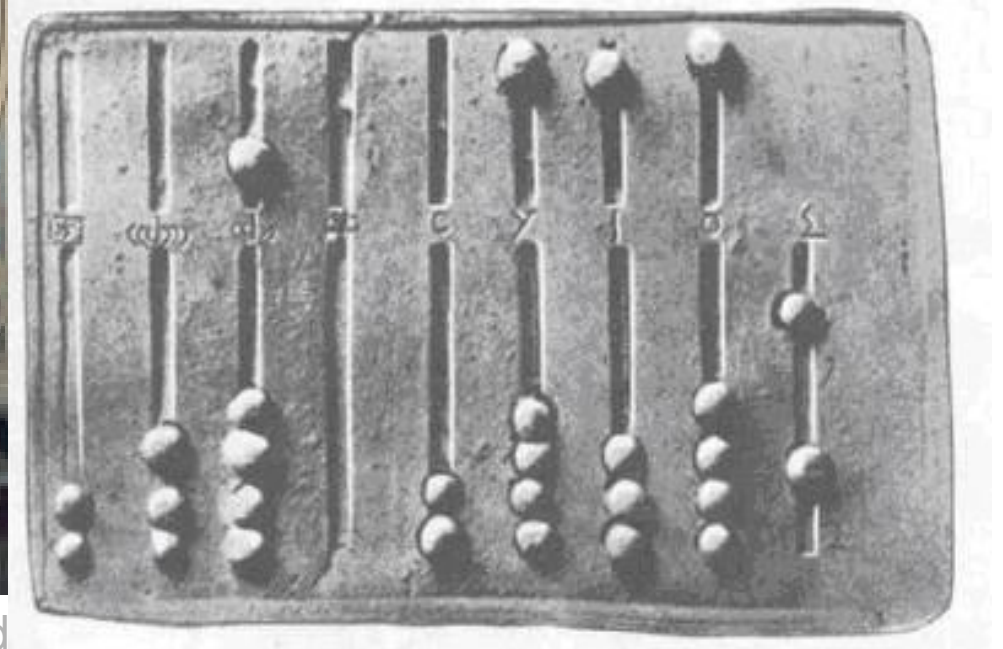
IL GIARDINO DI ARCHIMEDE
unmuseo
per la [matematica]



Numeri e abachi degli antichi romani



Paolo Uccello, Quadrante dell'orologio di
Maria del Fiore, 1443



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I SIMBOLI

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COME SCRIVERE
QUESTI NUMERI?

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1492

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CCLII

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XCVII

LXXXVII

763

DCCLXIII

MCCCCLXXXII

1492

MCDXCII

IL
G I V O C O
DE GLI SCACCHI

Di Rui Lopez, Spagnuolo;

Nuouamente tradotto in lingua Italiana
da M. GIO. DOMENICO TARSIA.

A L L' E C C E L L E N T I S S I M O
S. I A C O P O B V O N C O M P A G N I
D V C A D I S O R A, E D' A R C E,

*Sig. d' Arpino, Marchese di Vignuola, Capitano Generale de gli
huomini d' arme del Re Cattolico nello Stato di Milano, e
Gouernator Generale di Santa Chiesa, &c.*

C O N P R I V I L E G I O.



I N V E N E T I A,
P r e s s o C o r n e l i o A r r i u a b e n e.
M D L X X I I I.

Paolo Uccello, Quadrante dell'orologio di Santa
Maria del Fiore, 1443

LXVIII. Sessantanove. *Sexagintanove.*

LXX. Settanta. *Septuaginta.*

LXXV. Settantacinque. *Septuagintaquinque.*

LXXX. Ottanta. *Octuaginta.*

LXXX. Noanta. *Nonaginta.*

LXXXVIII. Noantanove. *Nonagintanove.*

C. Cento. *Centum.*

CI. Centouno. *Centum et unus, ...*

CVIII. Centonove. *Centum et novem.*

CX. Centodieci. *Centum et decem.*

CXX. Centoventi. *Centum viginti.*

CXXX. Centotrenta. *Centum triginta.*

CXXX. Centoquaranta. *Centum quadraginta.*

CL. Centocinquanta. *Centum quinquaginta.*

CLX. Centosessanta. *Centum sexaginta.*

DE FIDEICOMMISSIS

Præsertim Vniuersalibus,

TRACTATUS

FREQUENTISSIMVS.

M. ANTONII PEREGRINI

PATAVINI.

Scrittore della Repubblica Veneta Illustrissima, & Esperto.

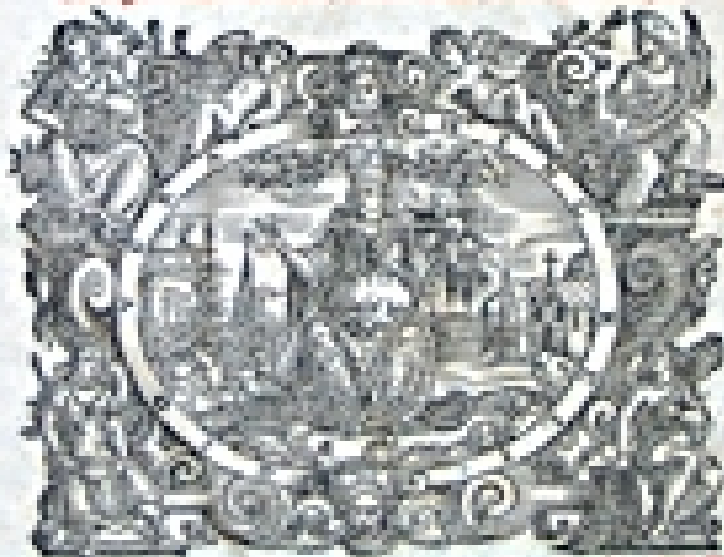
Primo del suo in Italia, quale in conferenze con i suoi famigliari, & amici suoi, & per molti anni.

Al quale sono state aggiunte alcune cose, & particolarmente le più nuove, & quelle che sono state ritrovate, & che non erano state prima, & che sono state ritrovate, & che non erano state prima, & che sono state ritrovate, & che non erano state prima.

Editio Septima.

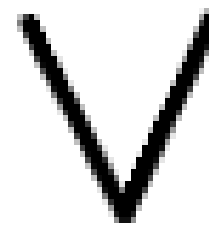
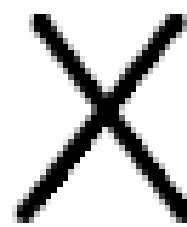
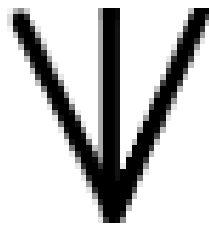
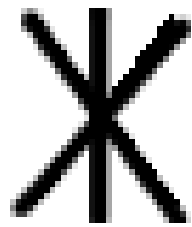
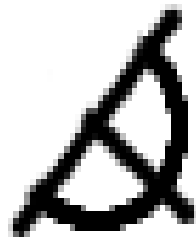
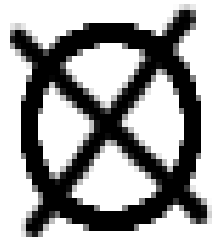
CON SPERANZA, ET INDICE SOPRAPPRESO.

Trattato di Fideicommissi, Scritto da Antonio Pergrino, & ristampato per Tommaso Ballionio.

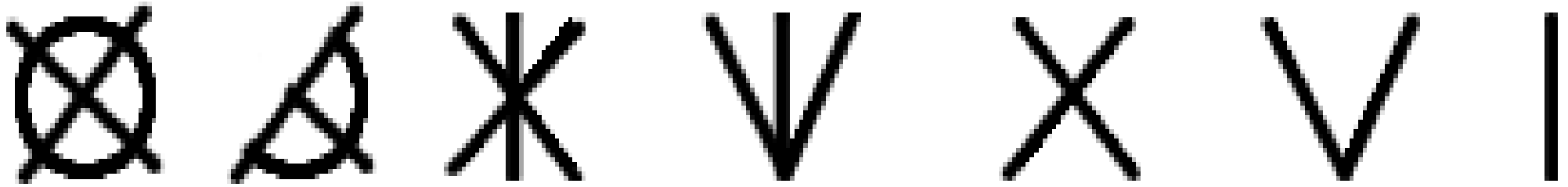


VENETIIS MDCXIII

Apud Thomam Ballionam.



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I SIMBOLI
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IN ORIGINE:
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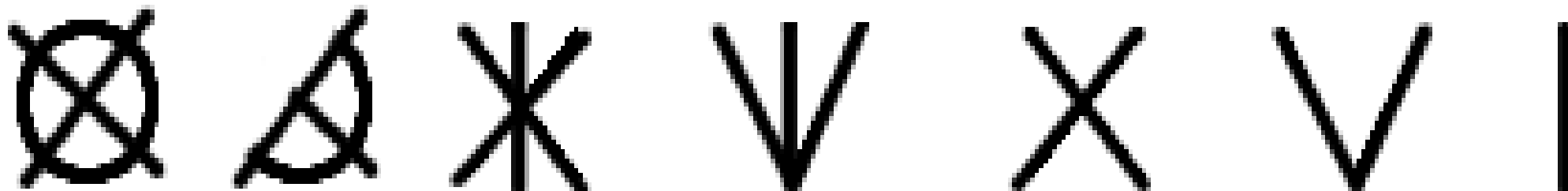
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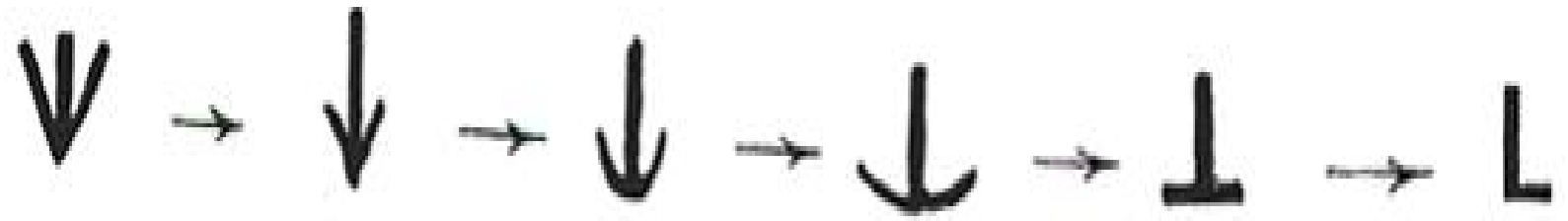
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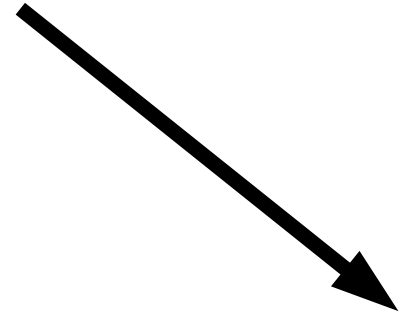


LA TRASFORMAZIONE DEI SIMBOLI

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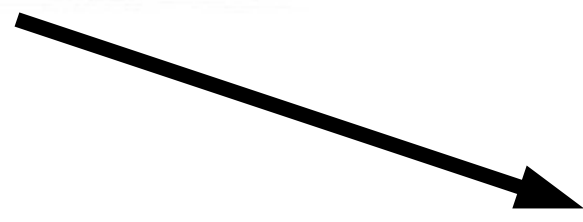
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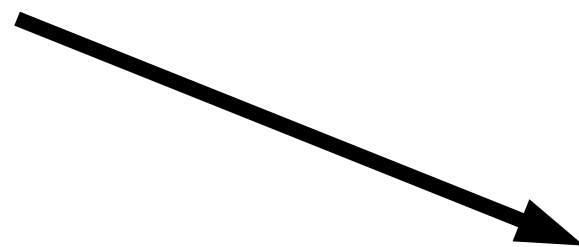
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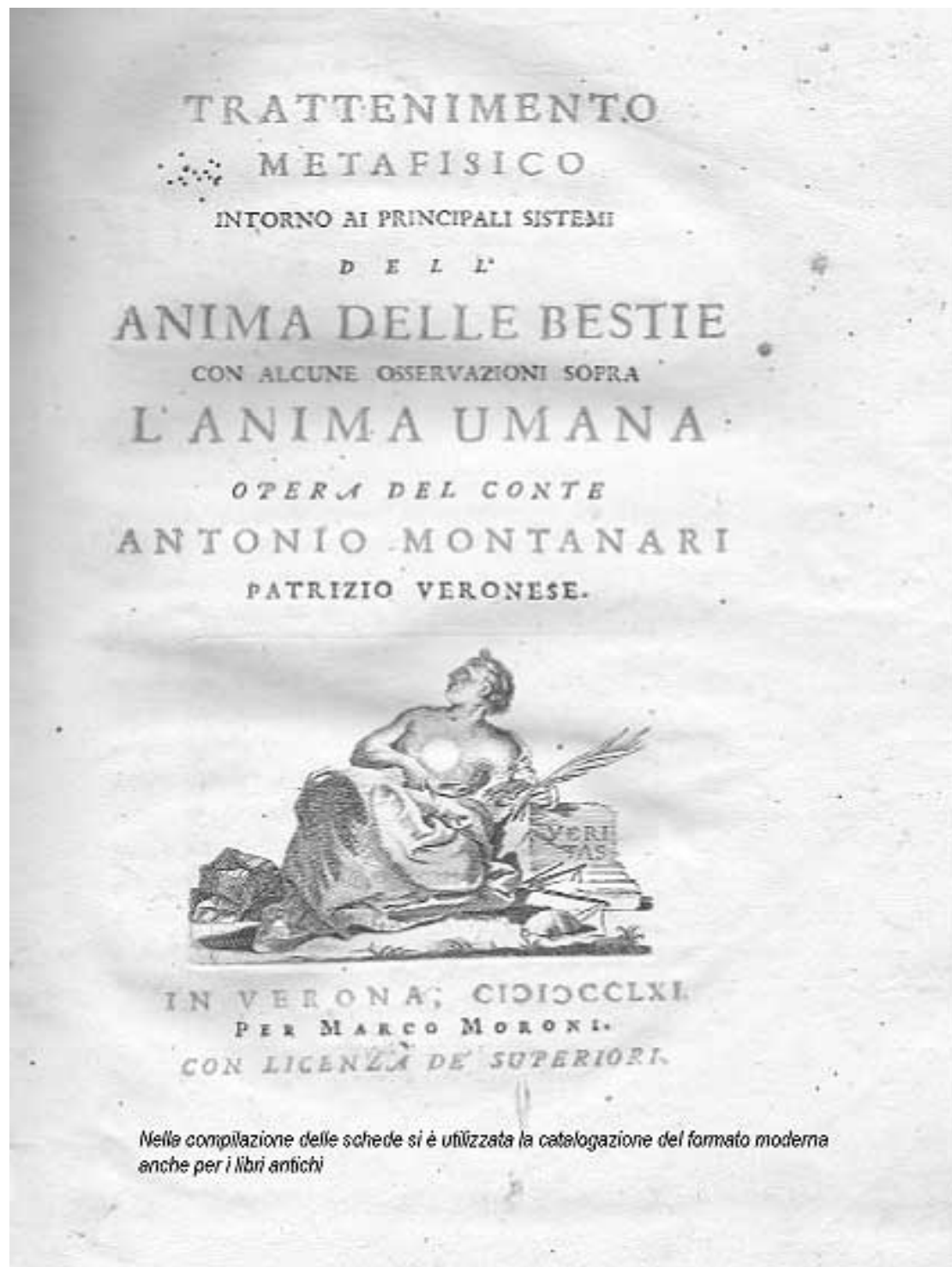
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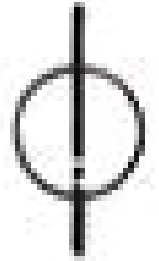
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Nella compilazione delle schede si è utilizzata la catalogazione del formato moderna anche per i libri antichi

E OLTRE IL MILLE?



M



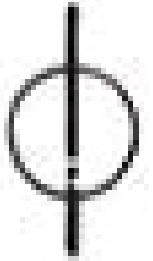
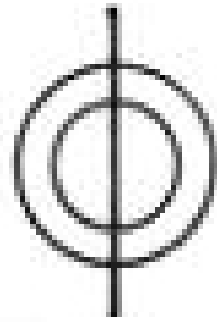
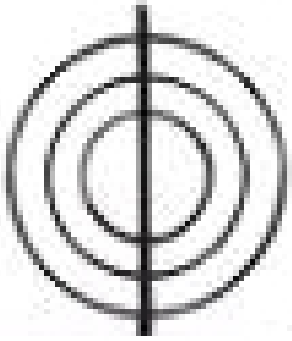
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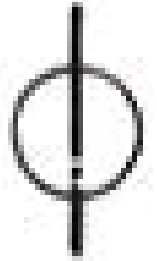
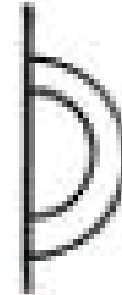
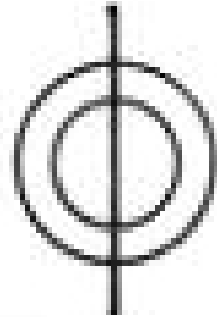
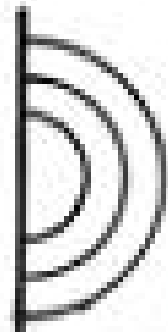
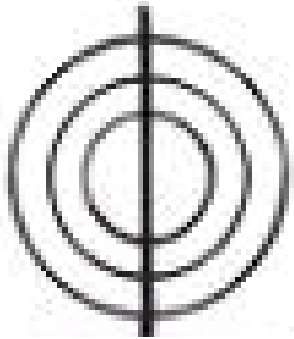
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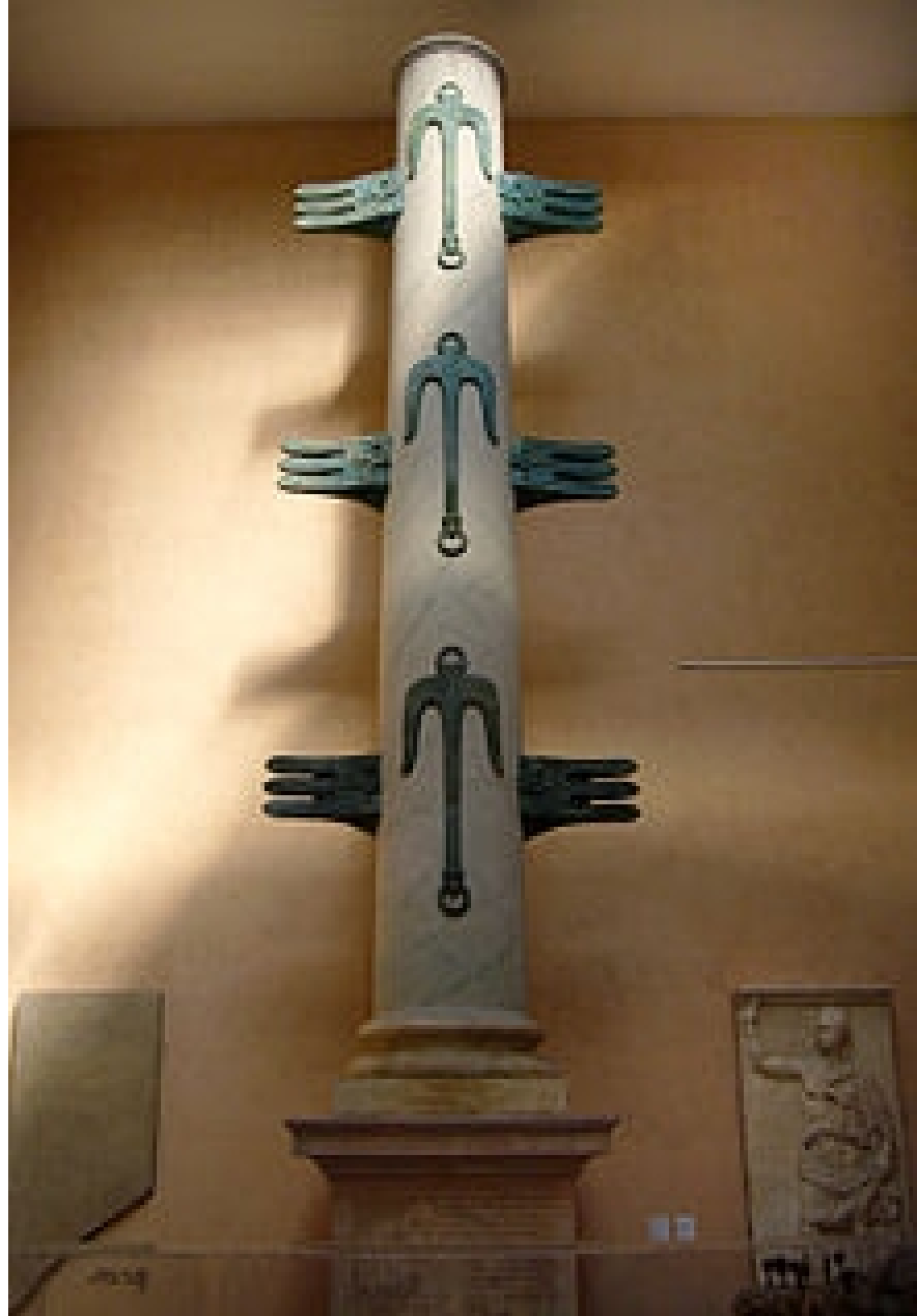
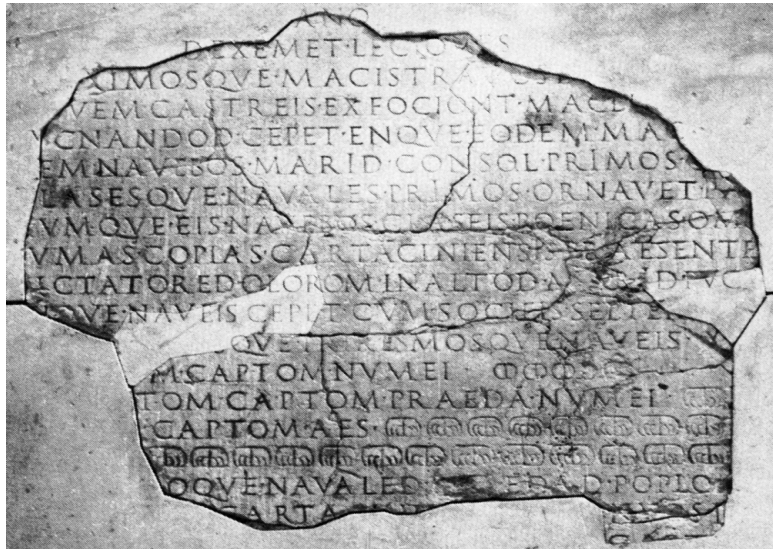


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Elogio di Gaio Duilio,

Roma, Pal. dei Cons, CIL 12.125, 6.1300

Colonna rostrata eretta a Roma nel 260 a.C. Per commemorare la vittoria del console romano sulla flotta cartaginese (battaglia di Milazzo, prima guerra punica)



ANNO
DEXEMET·LECTO·
XIMOSQVE·MACISTR·
VEM·CASTREIS·EX·FOCIONT·MAC·
V·CNANDOD·CEPET·ENQVE·E·ODEM·MA·
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LASESO·VEN·NAVALES·PRIMOS·ORNAVET·
VM·QVE·EIS·NA·ES·CLASEIS·BOENICA·SON·
VM·AS·COPIAS·CARTACLNIENSIS·A·ESENTE
ICTATORE·ED·OLOROM·IN·ALTO·D·A·D·V·C·
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QVE·TR·KEMOSQVE·ENAVEIS·
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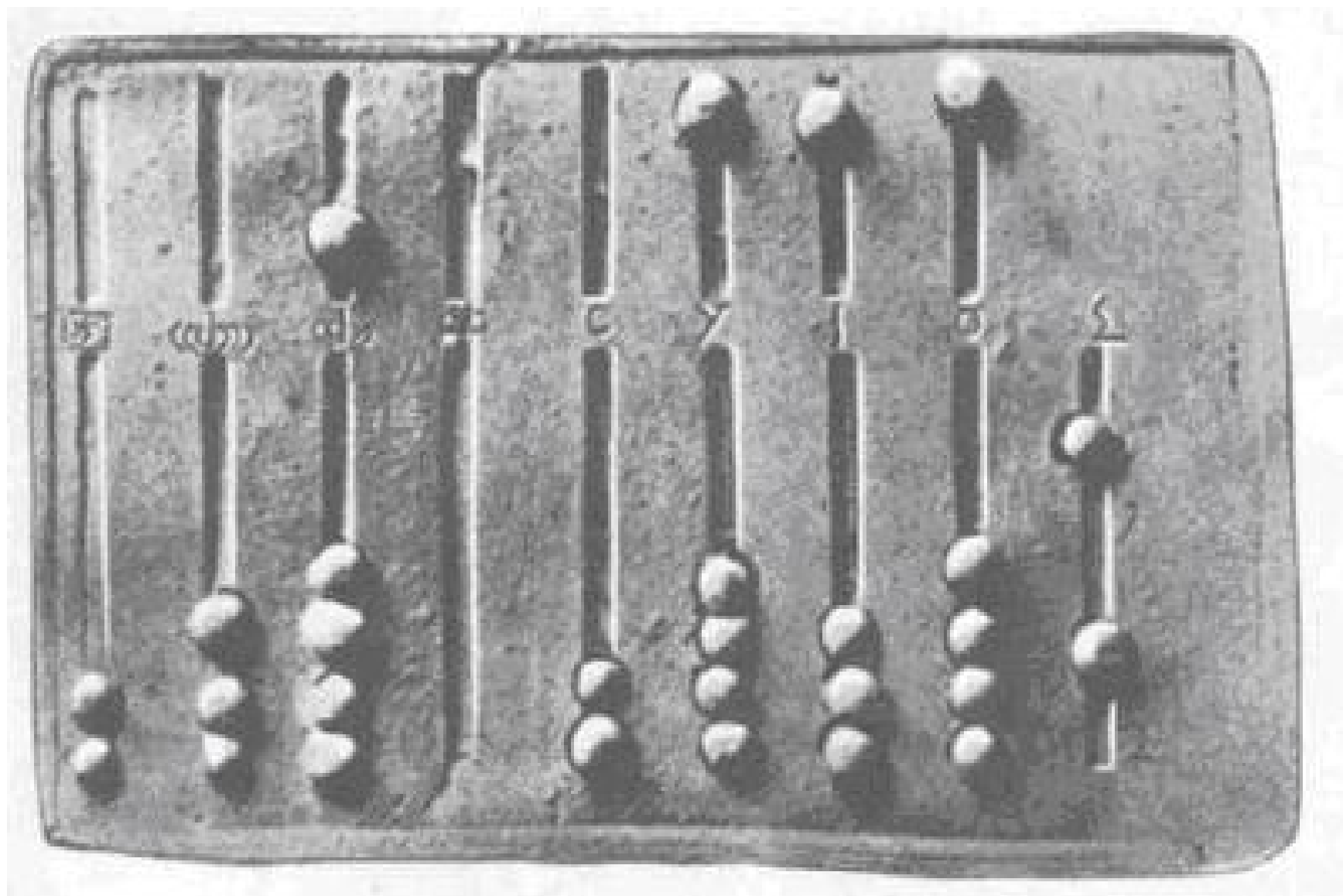
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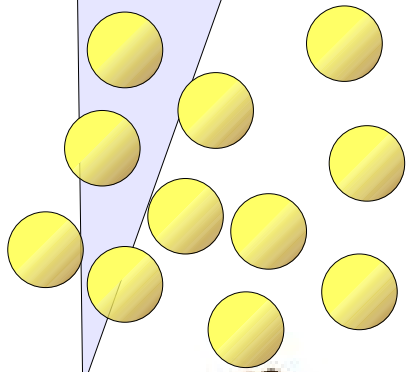
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L'ABACO



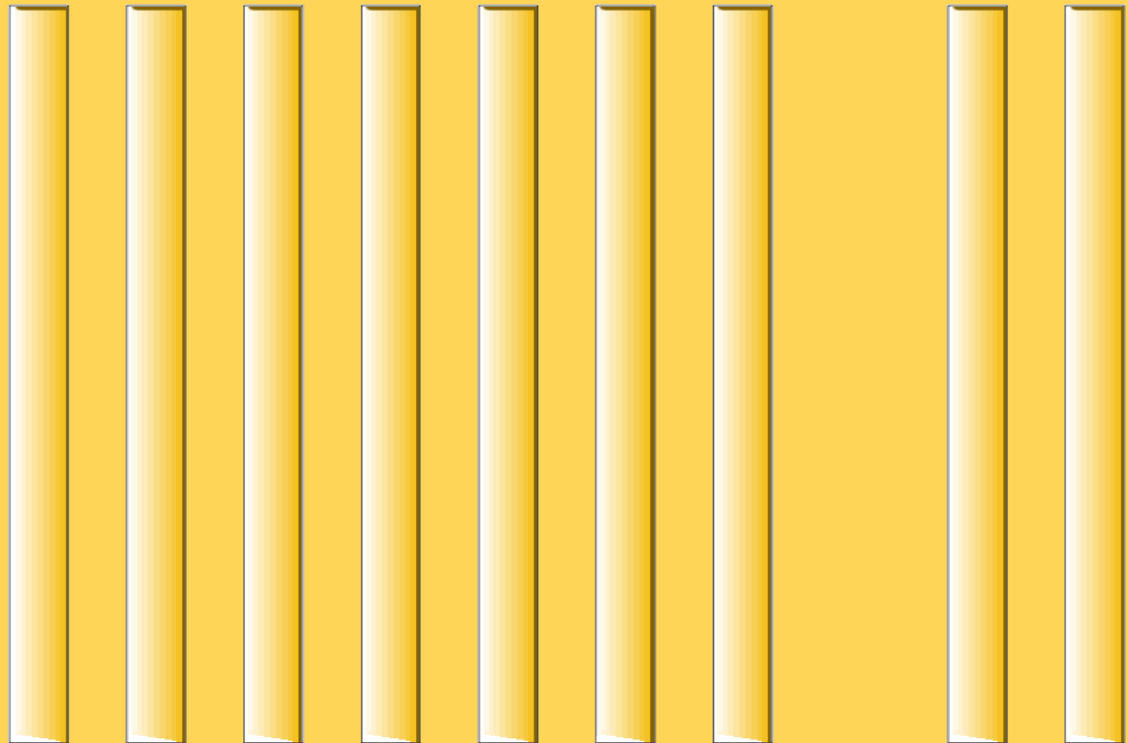
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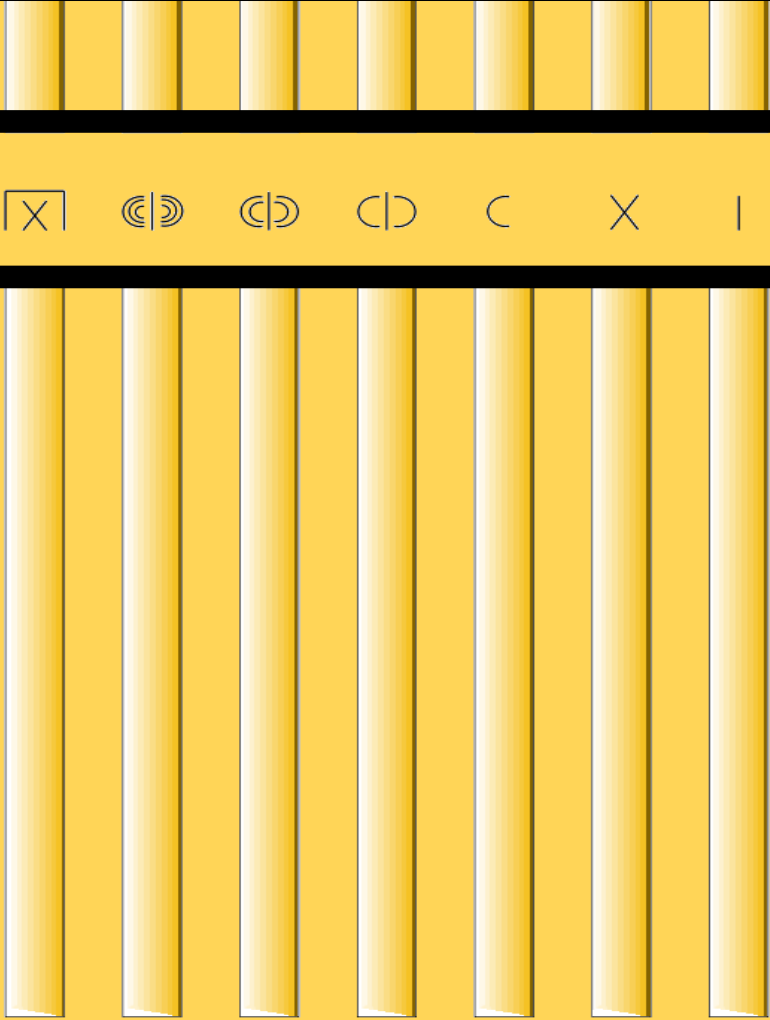
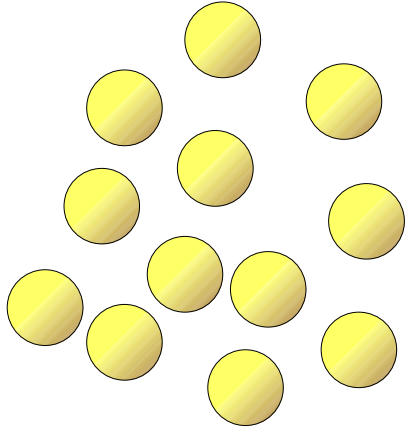
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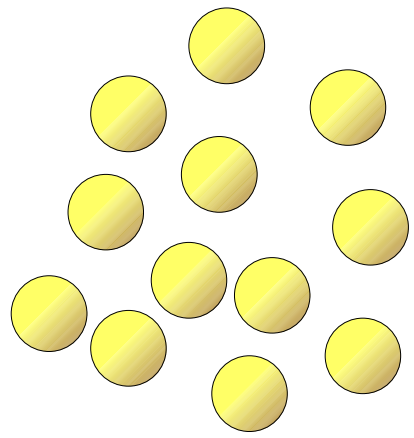
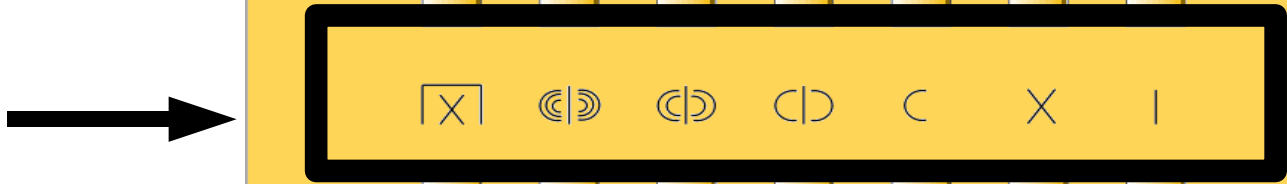
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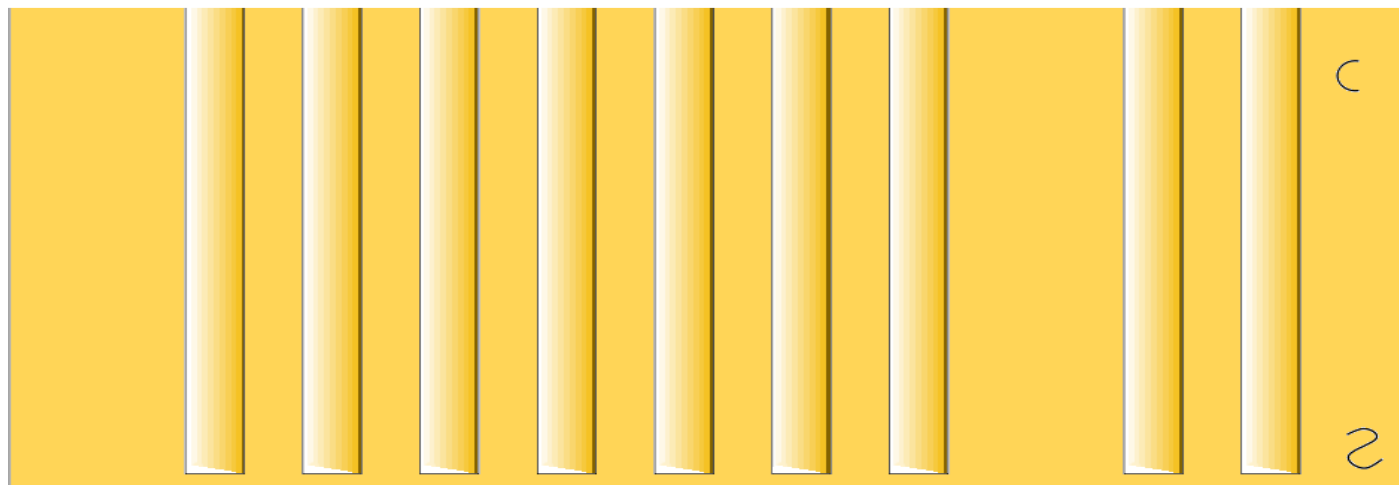
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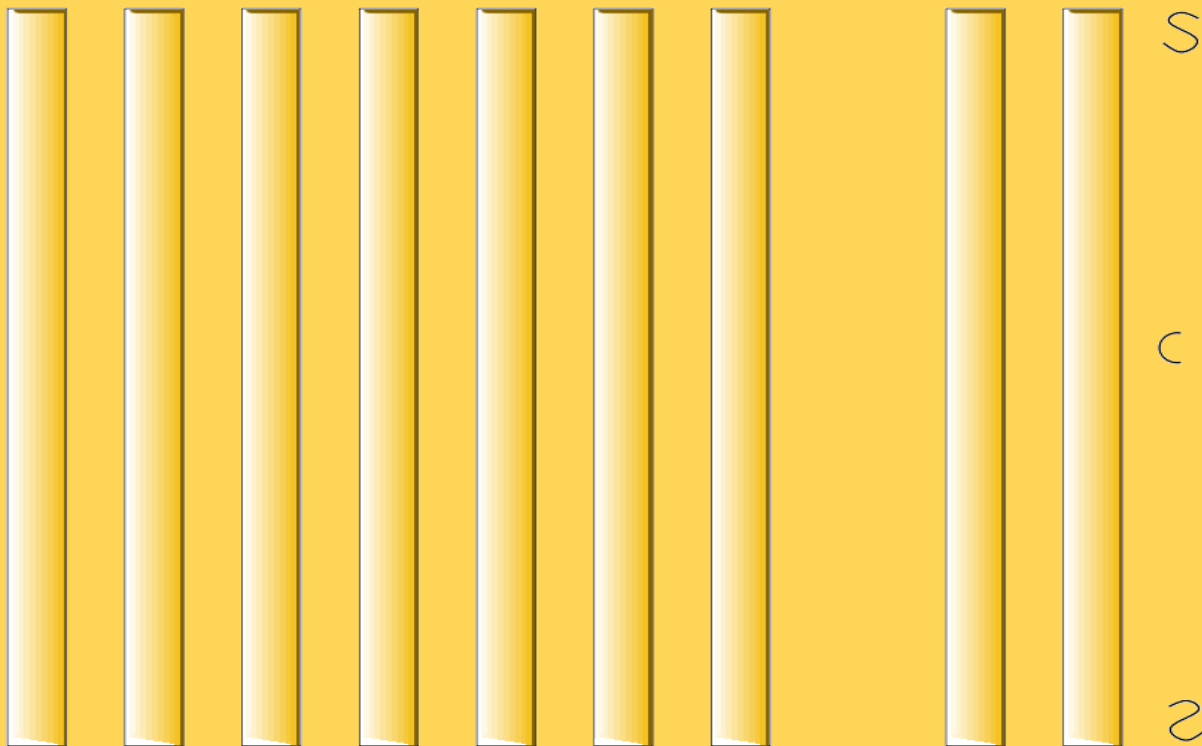


CXXIII

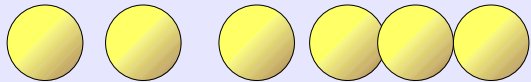
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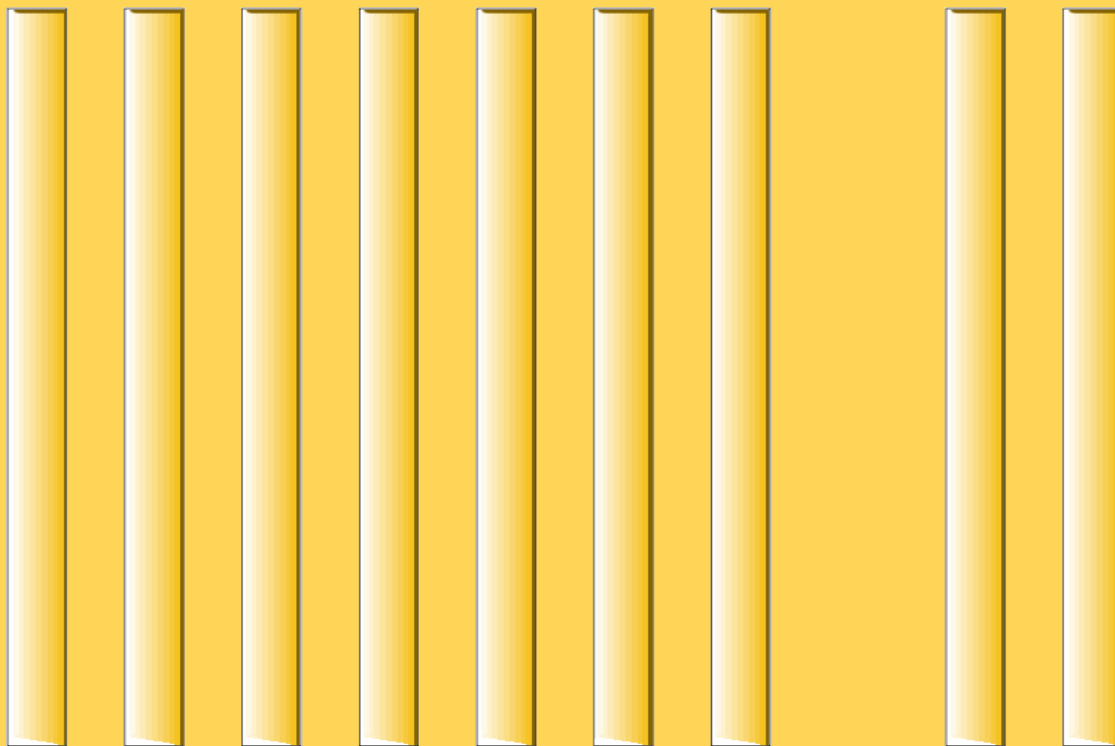
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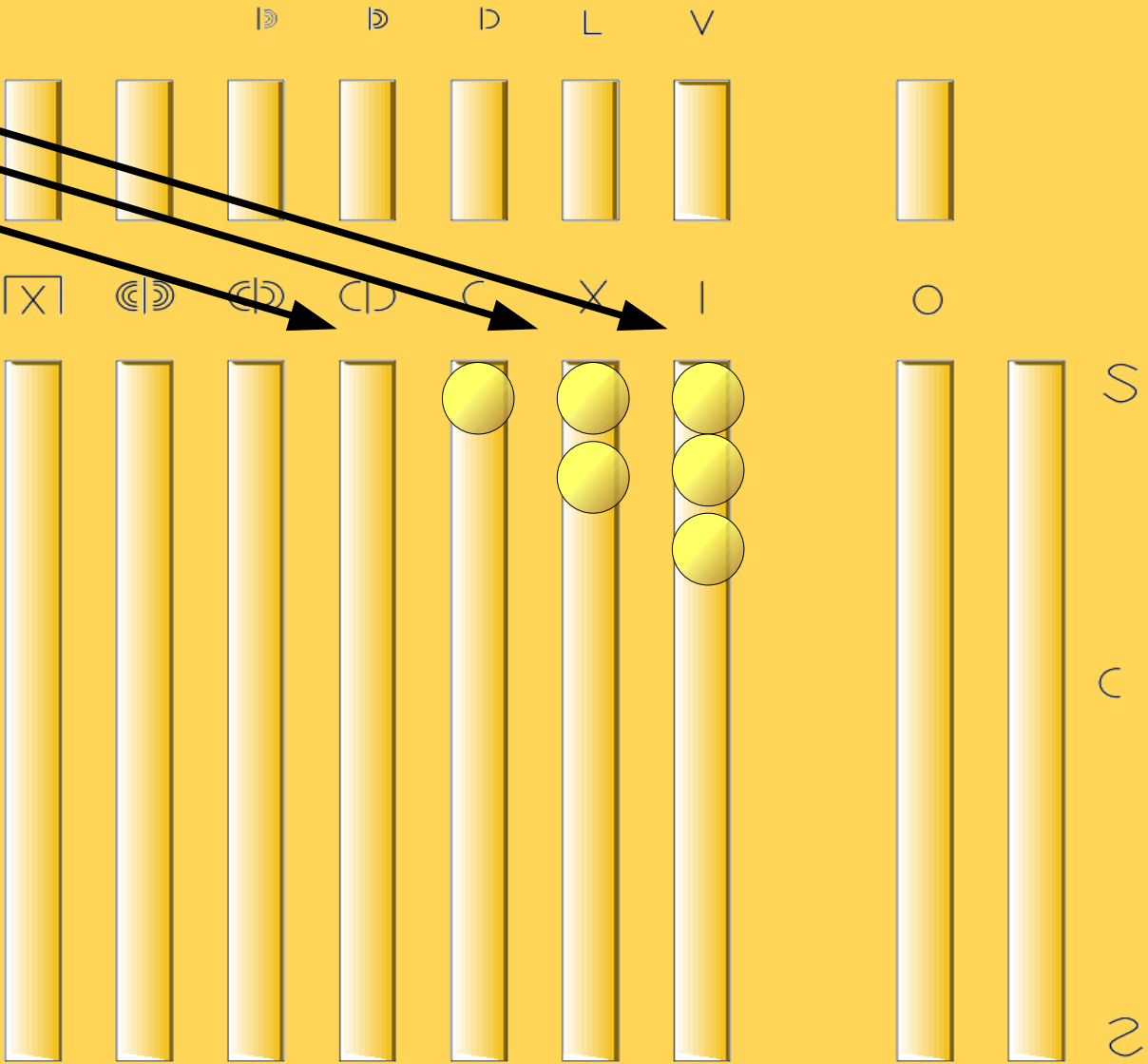
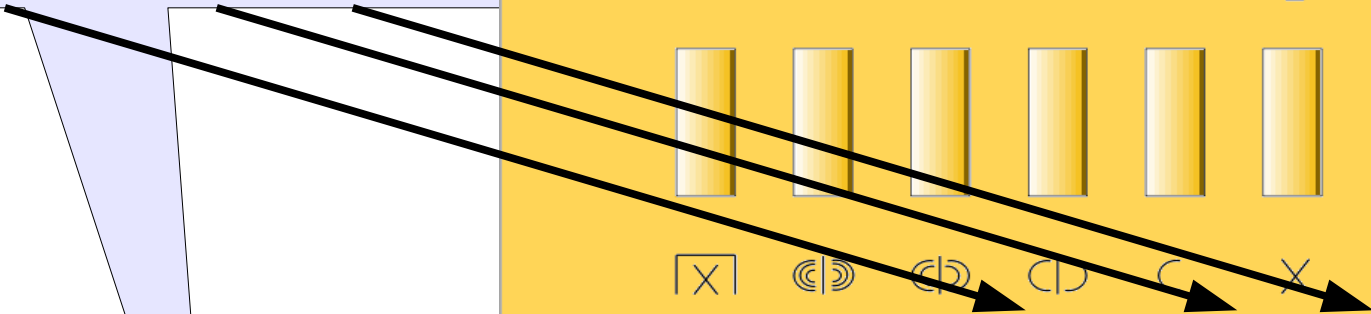
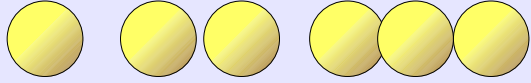
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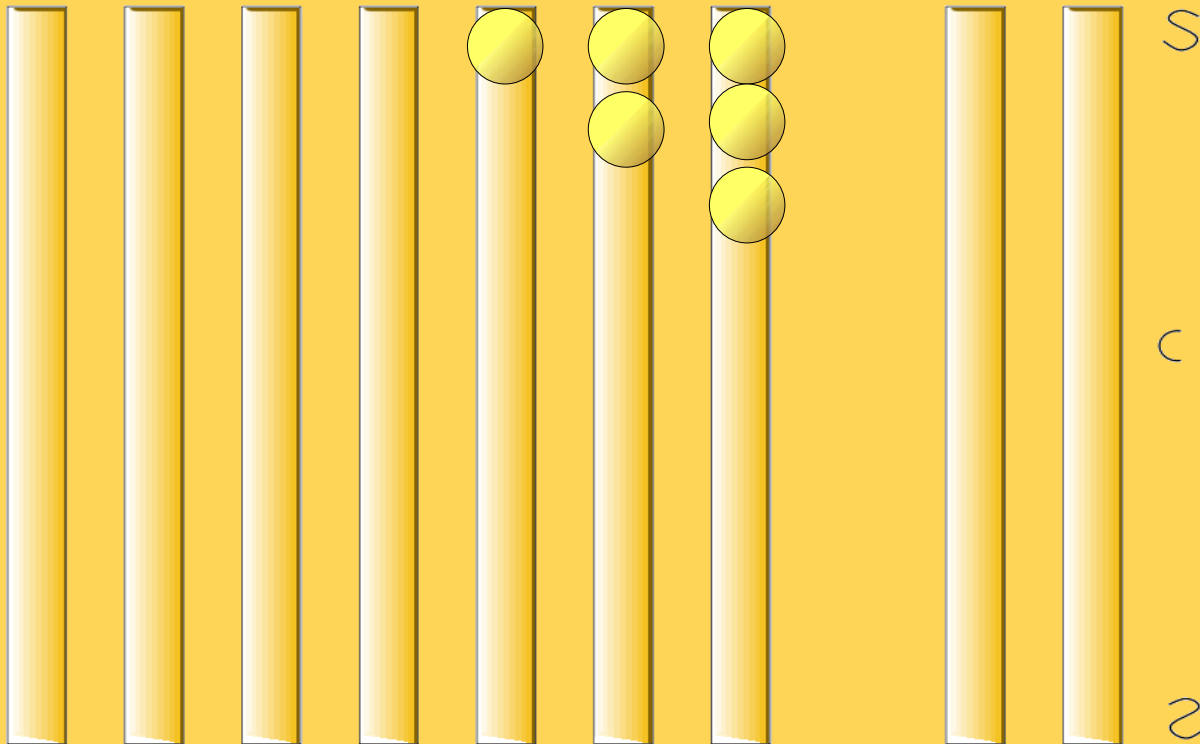


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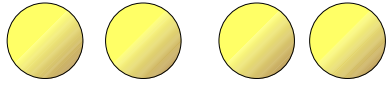
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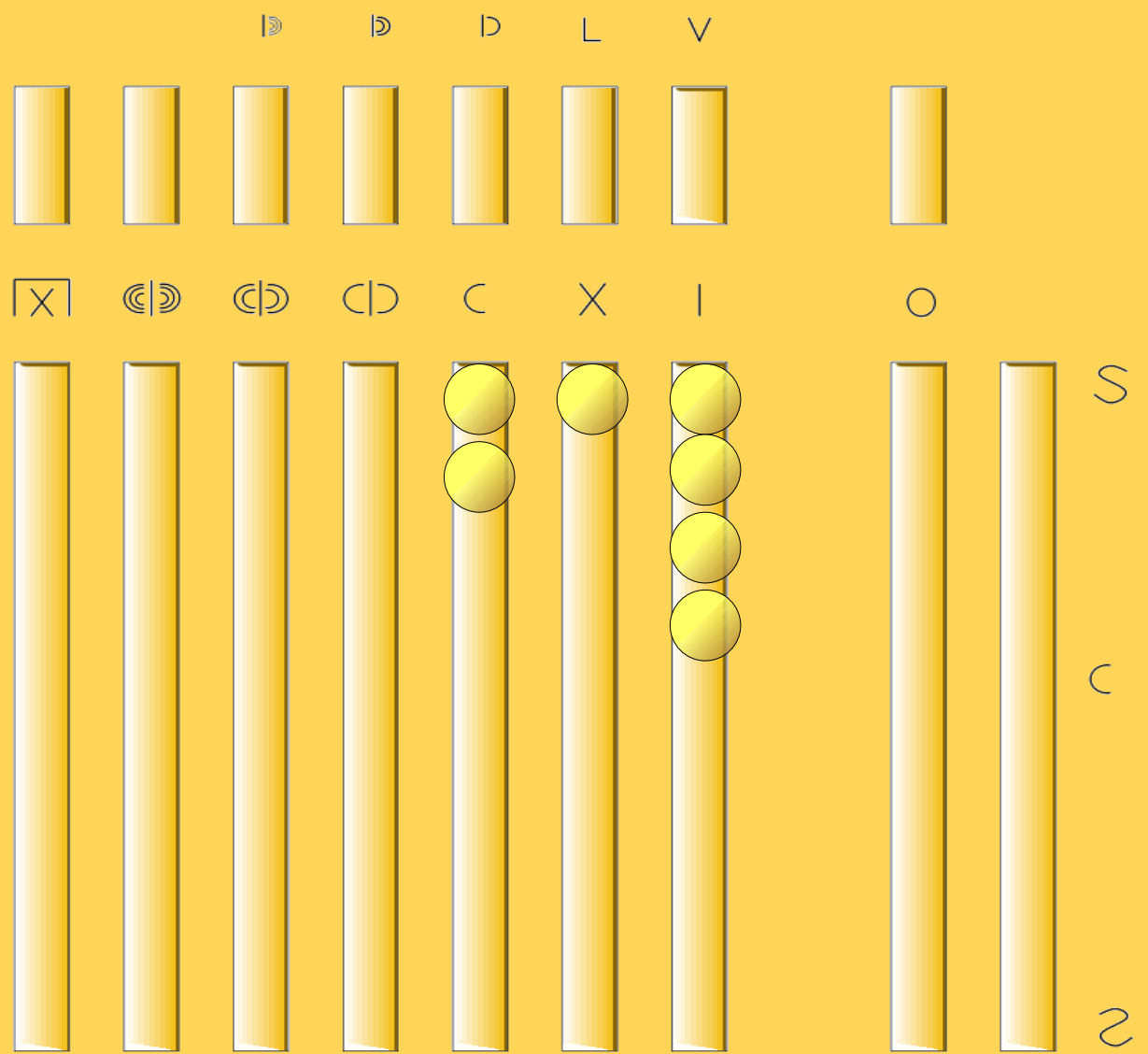
LXVI



Abacus representation of the Roman numeral LXVI. The abacus has 10 columns and 3 rows. The top row contains the numerals L, X, V, and I. The second row contains the numerals L, X, and I. The third row contains the numerals L, X, and I. The numerals L, X, and I are placed in the 6th, 7th, and 8th columns respectively. The numerals L, X, and I are placed in the 6th, 7th, and 8th columns respectively. The numerals L, X, and I are placed in the 6th, 7th, and 8th columns respectively.

		L	X	V	I				
		L	X		I				
		L	X		I				

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SULL'ABACO...





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V

					●	●		
X	C	C	C	C	X	I	O	
						● ● ●		
								S
								C
								Z



D D D L V
 X C C C C X I O
 S
 C
 S

MMCCCXXI



Abacus numerals: D, D, D, L, V

Abacus numerals: X, C, C, C, C, X, I, O

			●	●	●	●			S
			●	●	●				C
				●					2

MDCXVI



Abacus representation of the Roman numeral MDCXVI. The abacus consists of 10 vertical columns. Above the columns are the Roman numerals: M, D, D, D, L, V, and a space. Below the columns are the symbols: X, C, C, C, C, X, I, O, and a space. The columns contain the following symbols from left to right: empty, empty, empty, empty, D, L, V, empty, empty, empty. The symbols M, D, D, D, L, V, X, C, C, C, C, X, I, O, and the space are positioned above the corresponding columns.

XXXI

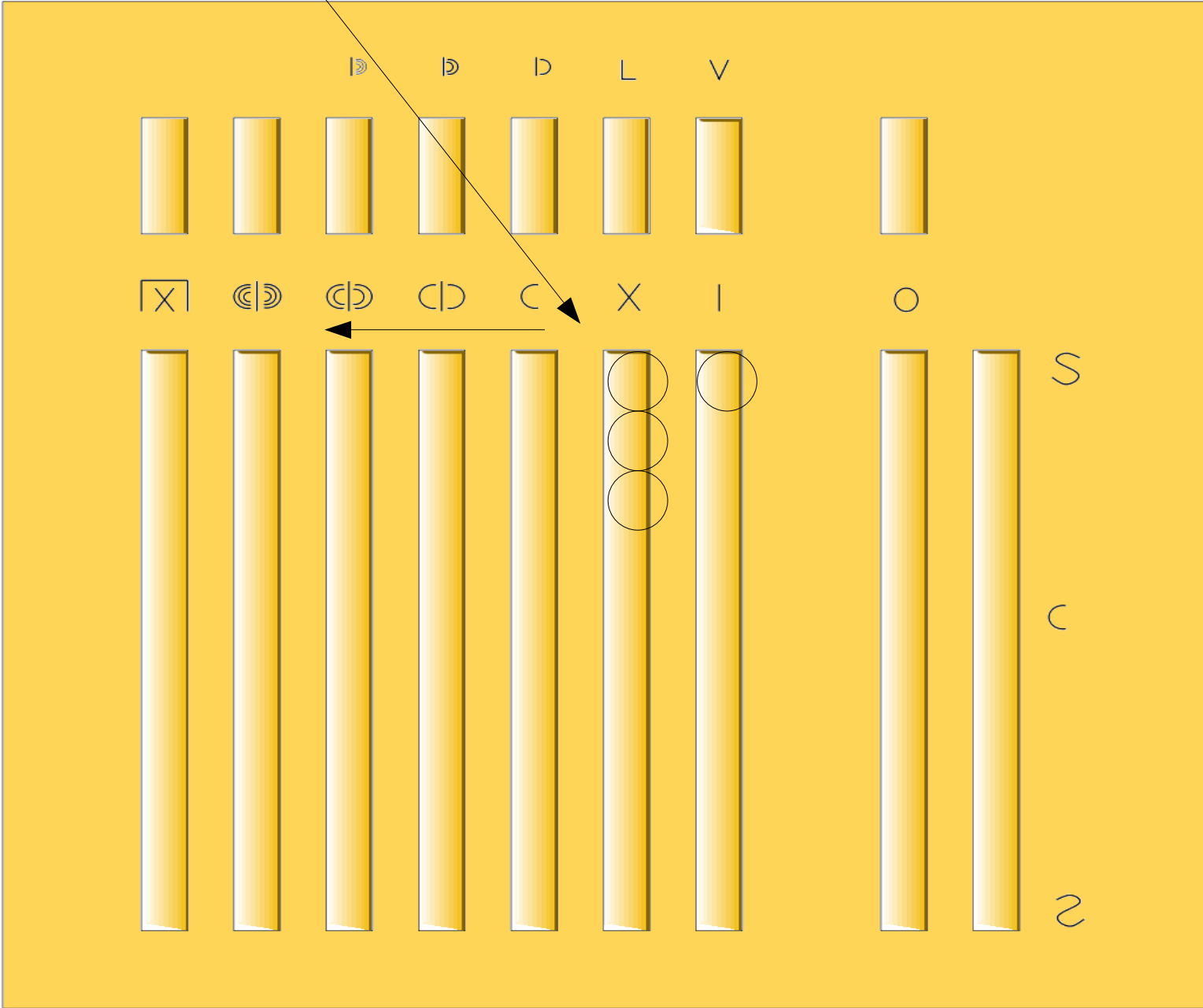
COME SCRIVERE
SULL'ABACO...



		D	D	D	L	V		
X	CD	CD	CD	C	X	I	O	
								S
								C
								2

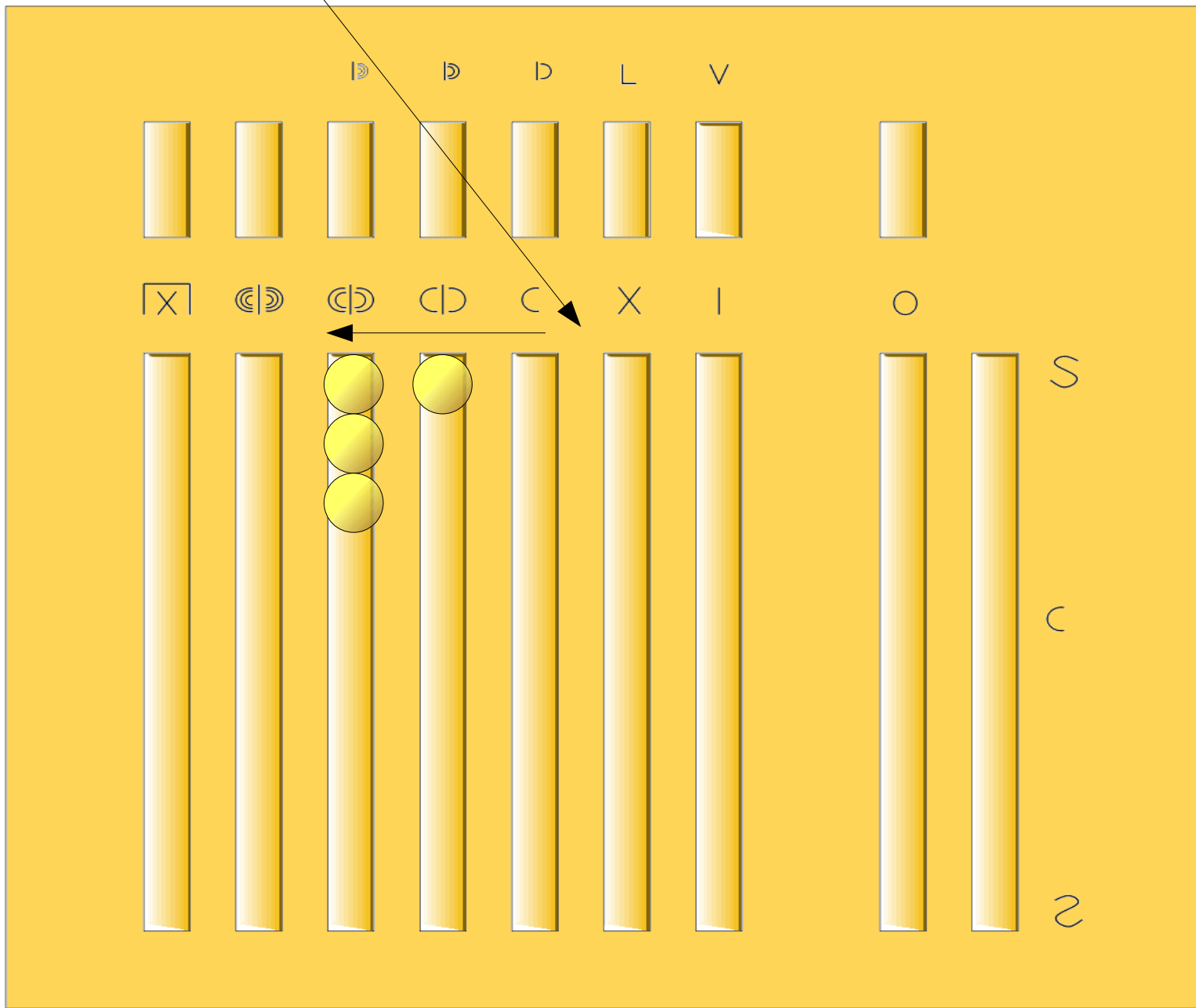
XXXI

XXXI



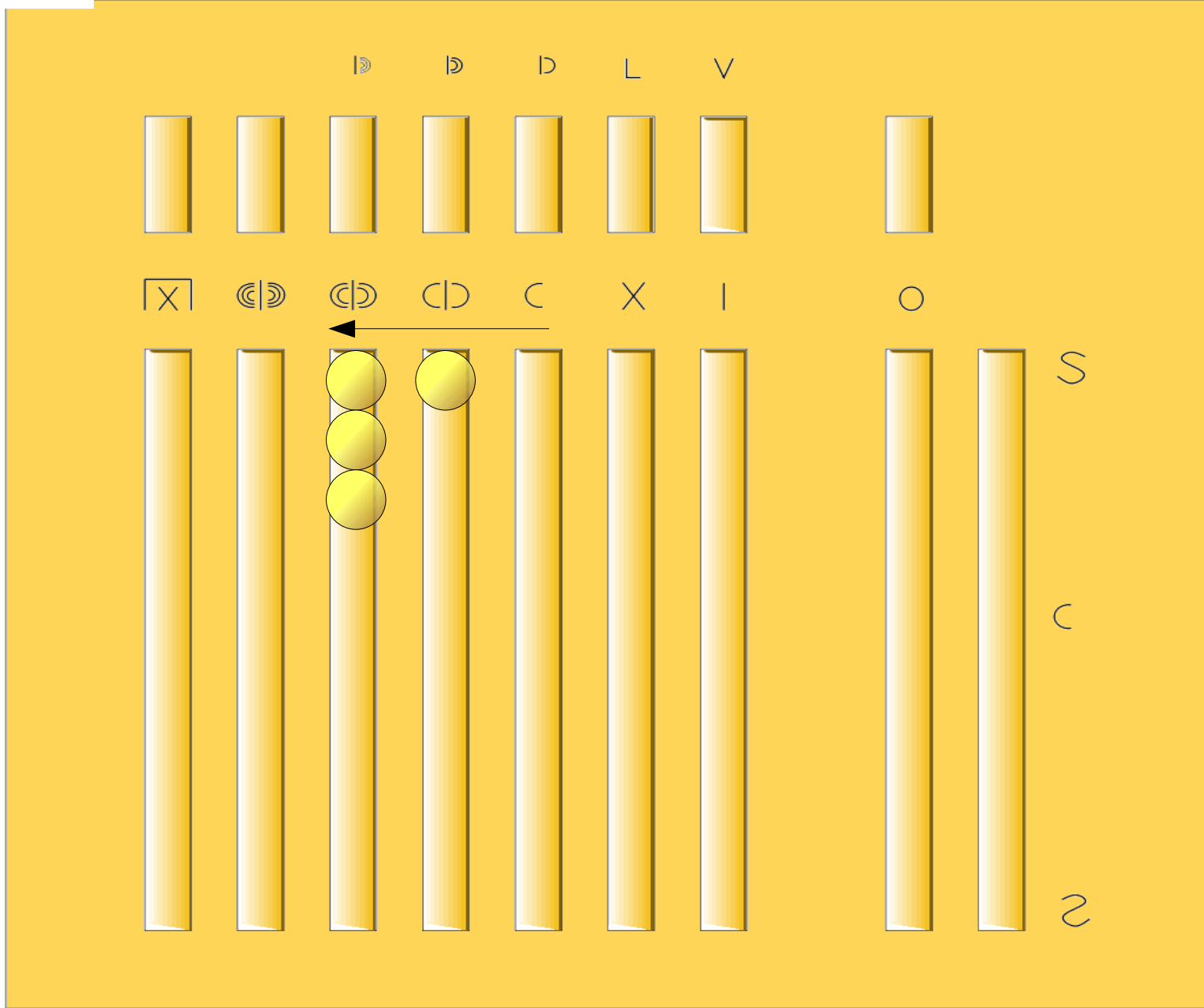
XXXI

XXXI



XXVI

ⓄⓄⓄⓂ



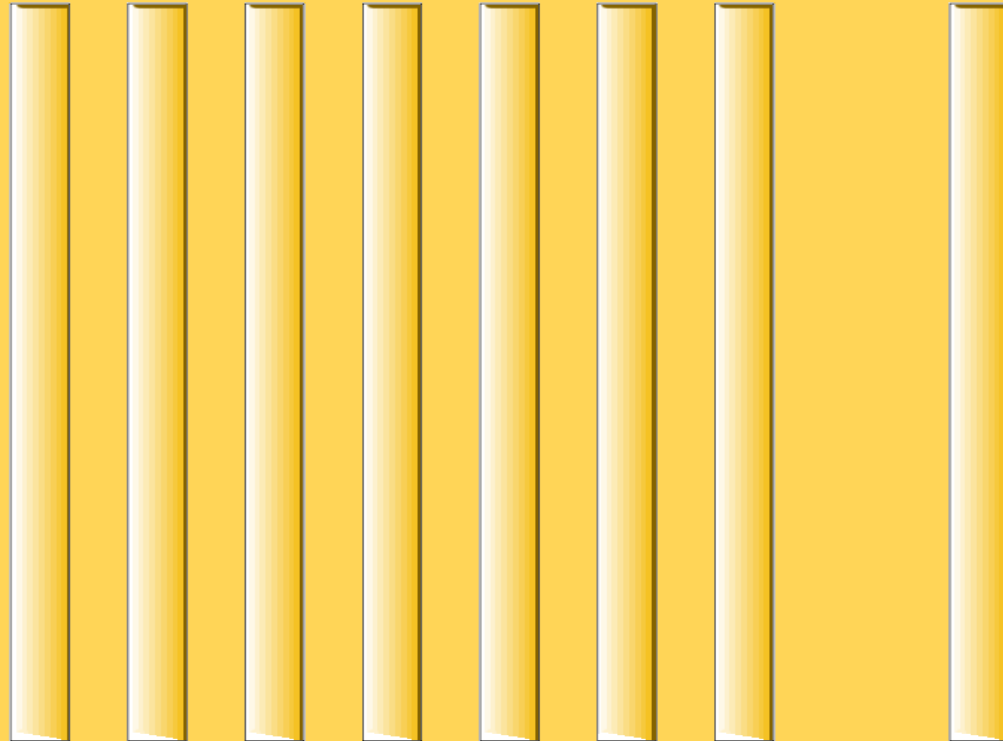
XXXI

SCRIVERE SULL'ABACO...

▯ ▯ ▯ ▯ ▯ ▯ ▯



X C C C C X I O



S

C

2



XXXIXXXI



IX L V

X	II	II	II	I	X	I	O	
		●	●		●	●		S
		●	●		●	●		C
		●						2

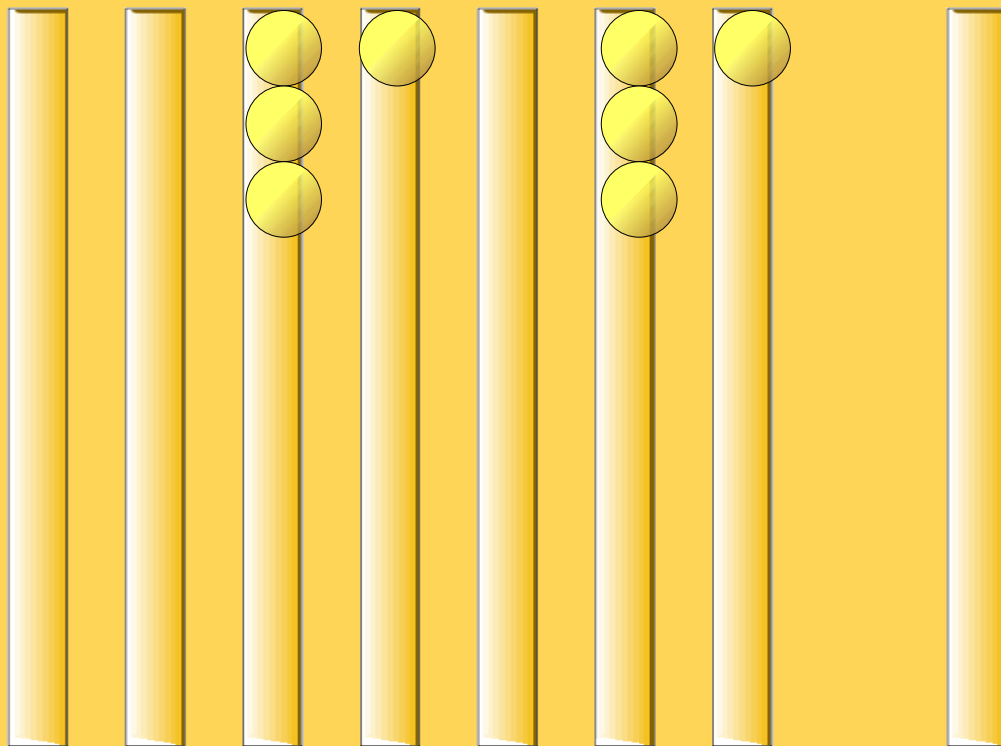
XXIXXXI

⊕⊕⊕⊕ XXVI

Ⓜ Ⓜ Ⓜ L V



ⓧ ⊕Ⓜ ⊕Ⓜ ⊕Ⓜ C X I O



S
C
2



MCCLVIIXVII



MCCLVIIXVII

		D	D	D	L	V		
X	CD	CD	CD	C	X	I	O	
								S
								C
								2

SUMMA

CON
L'ABACO

		D	D	D	L	V		
X	CD	CD	CD	C	X	I	O	
								S
								C
								2

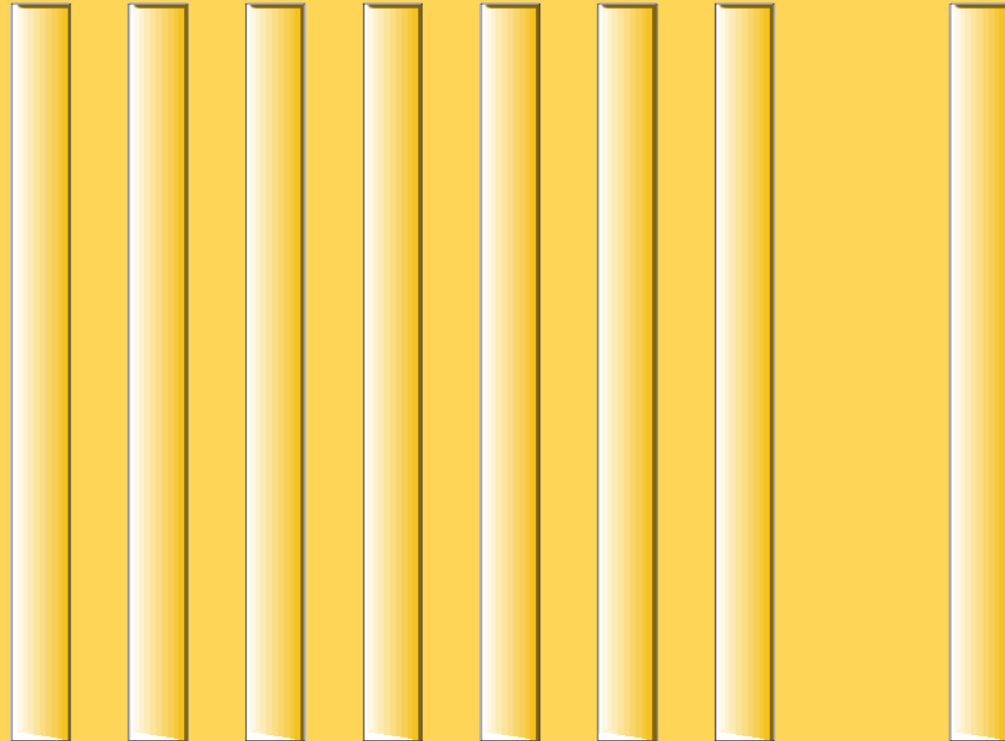


SUMMA

D D D L V



X C C C C X I O



S

C

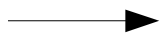
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CXXIII

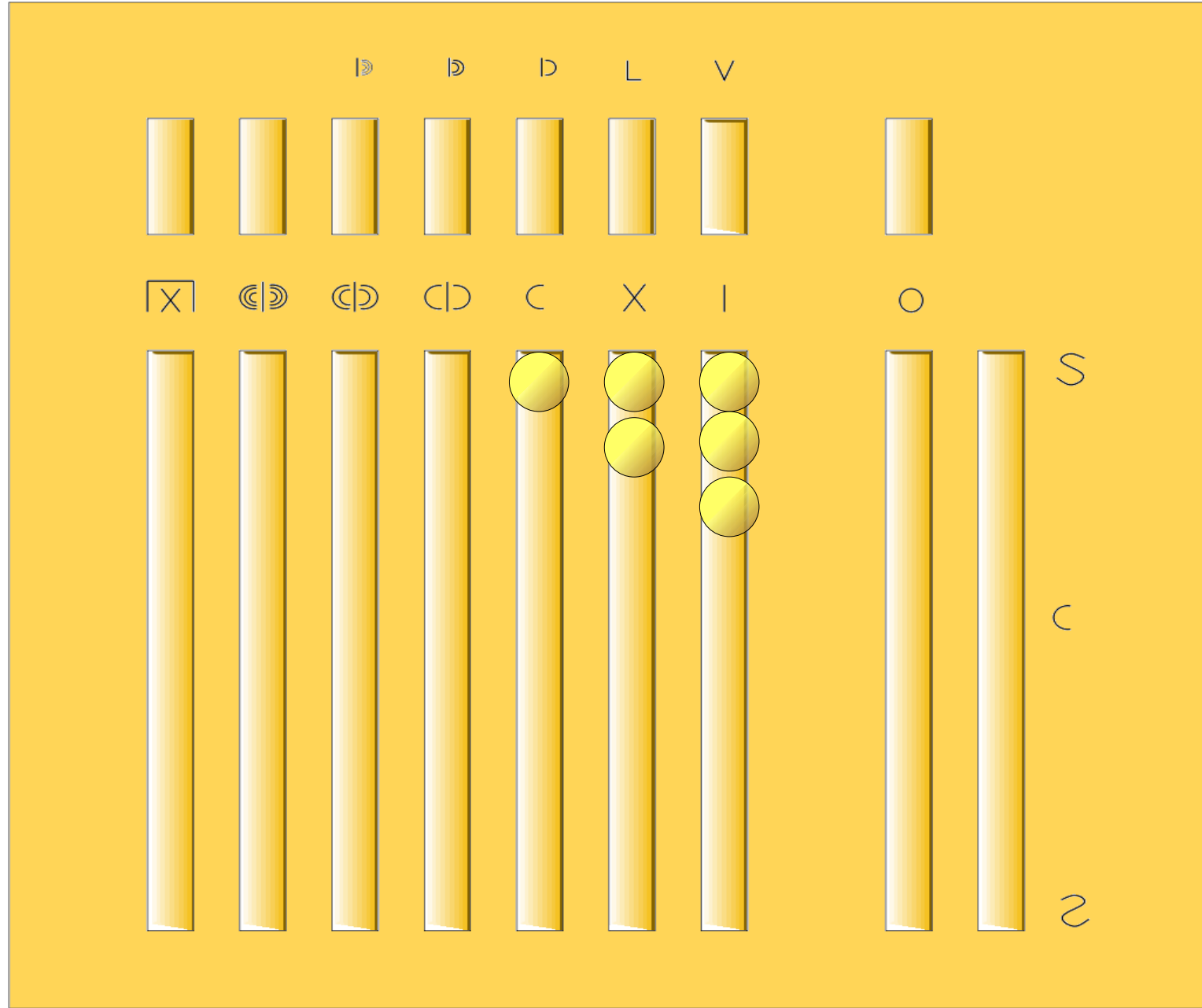
CCXI

SUMMA

CXXIII



CCXI



S

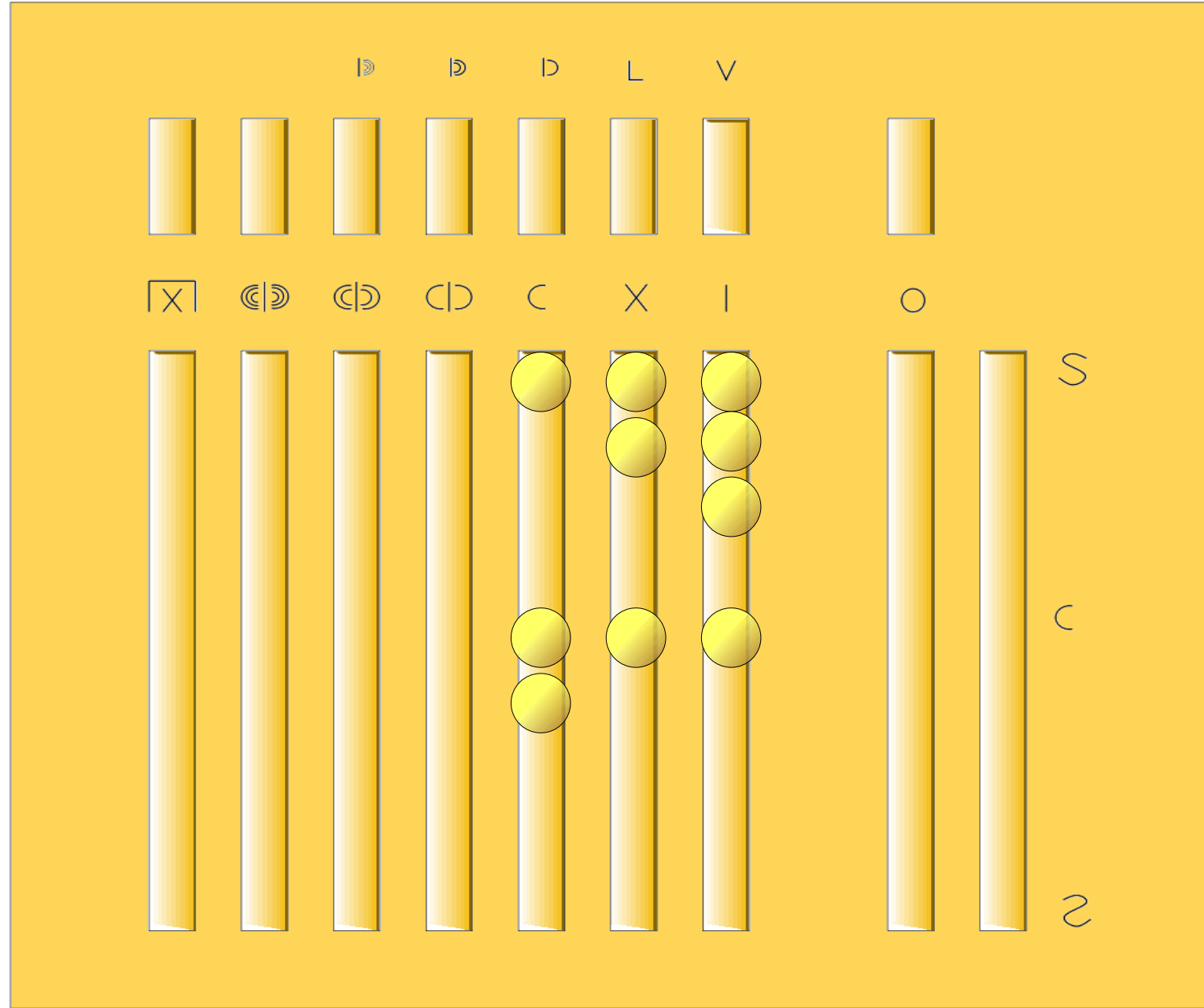
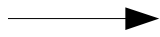
C

2

SUMMA

CXXIII

CCXI



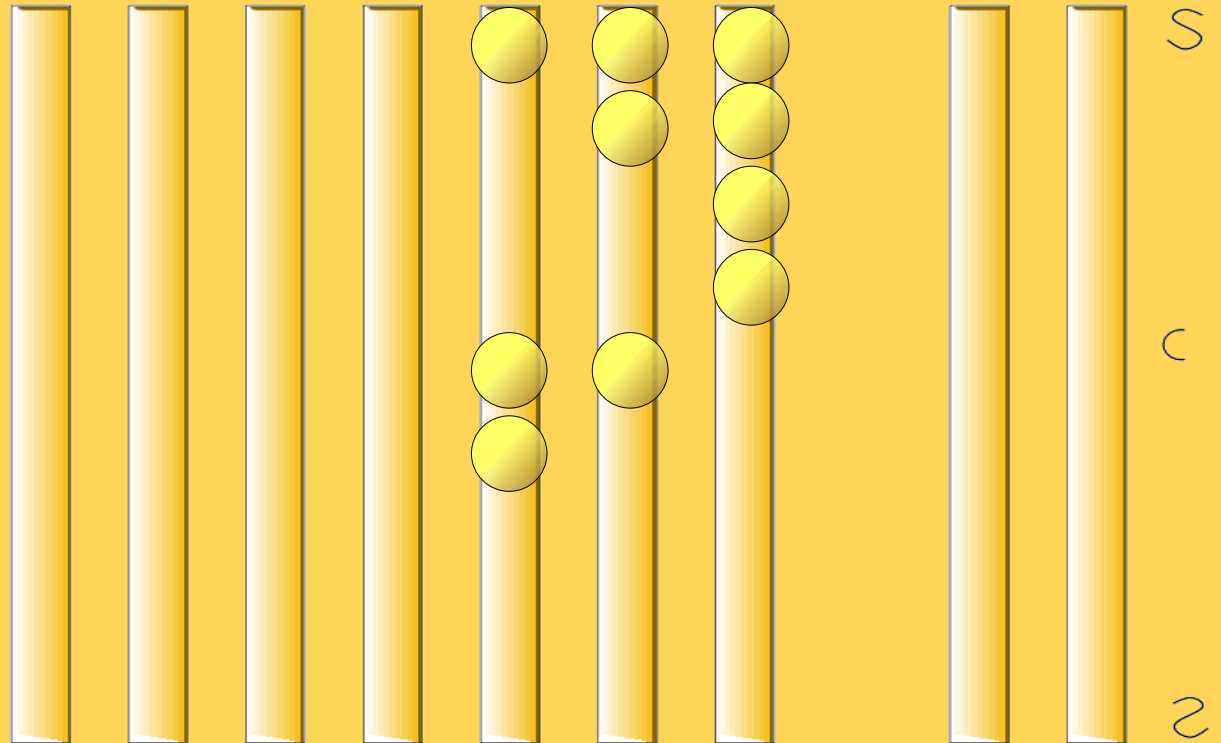
SUMMA

Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ

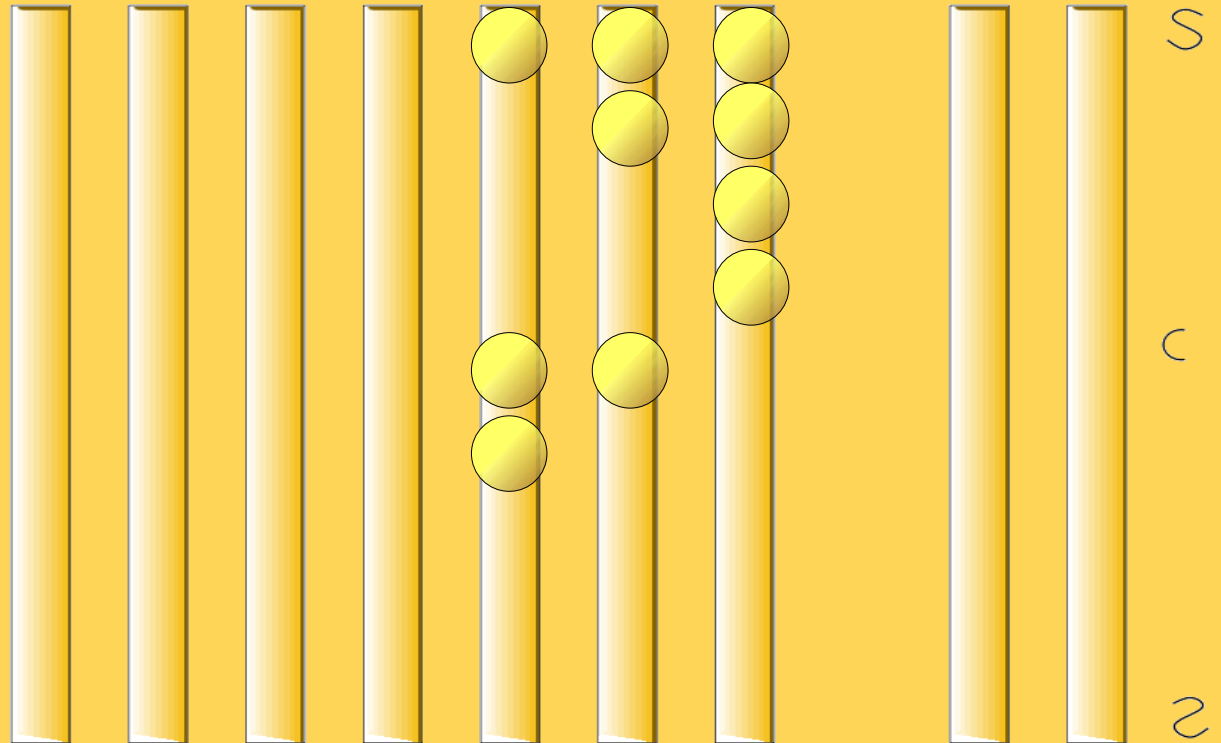


ⓧ Ⓞ Ⓞ Ⓞ Ⓞ ⓧ Ⓦ Ⓞ

CXXIII



CCXI

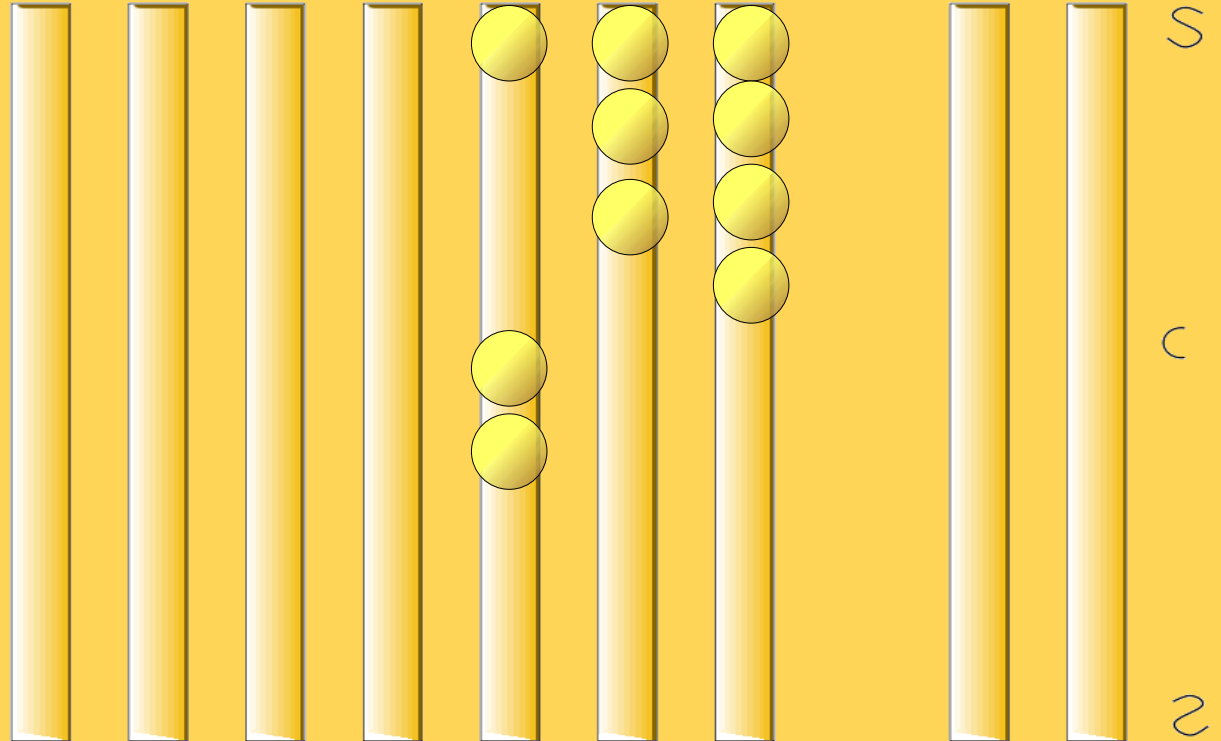


SUMMA

D D D L V



X C C C C X I O



CXXIII

CCXI

S

C

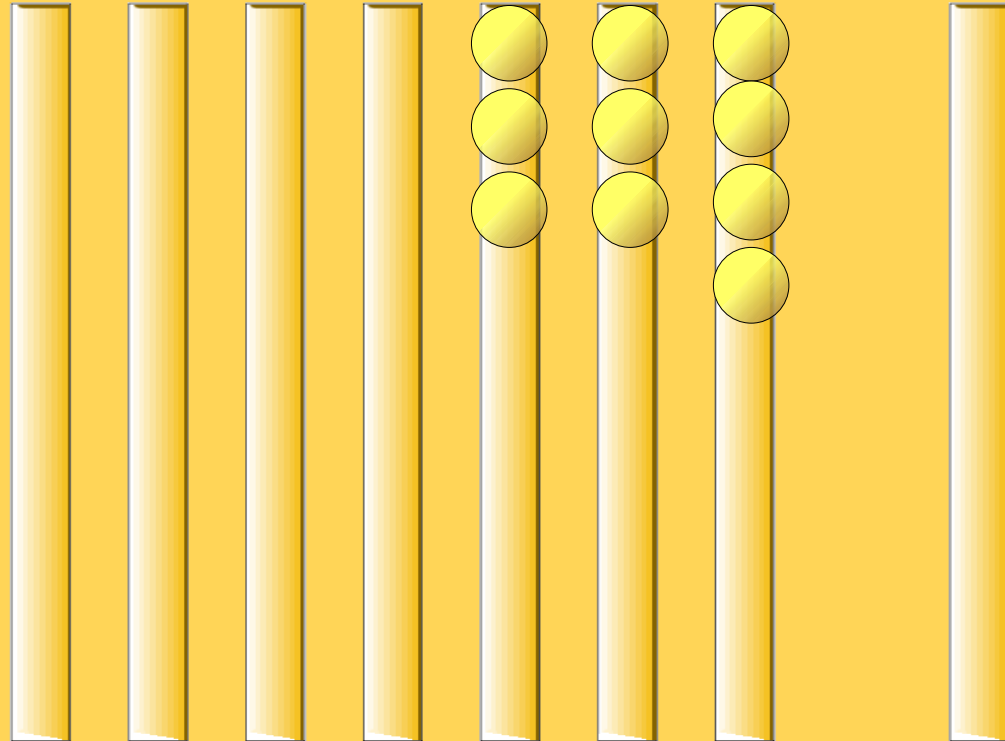
2

SUMMA

Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ Ⓚ



ⓧ ⓄⓄ ⓄⓄ ⓄⓄ Ⓞ ⓧ Ⓦ Ⓞ



S

C

2

CXXIII

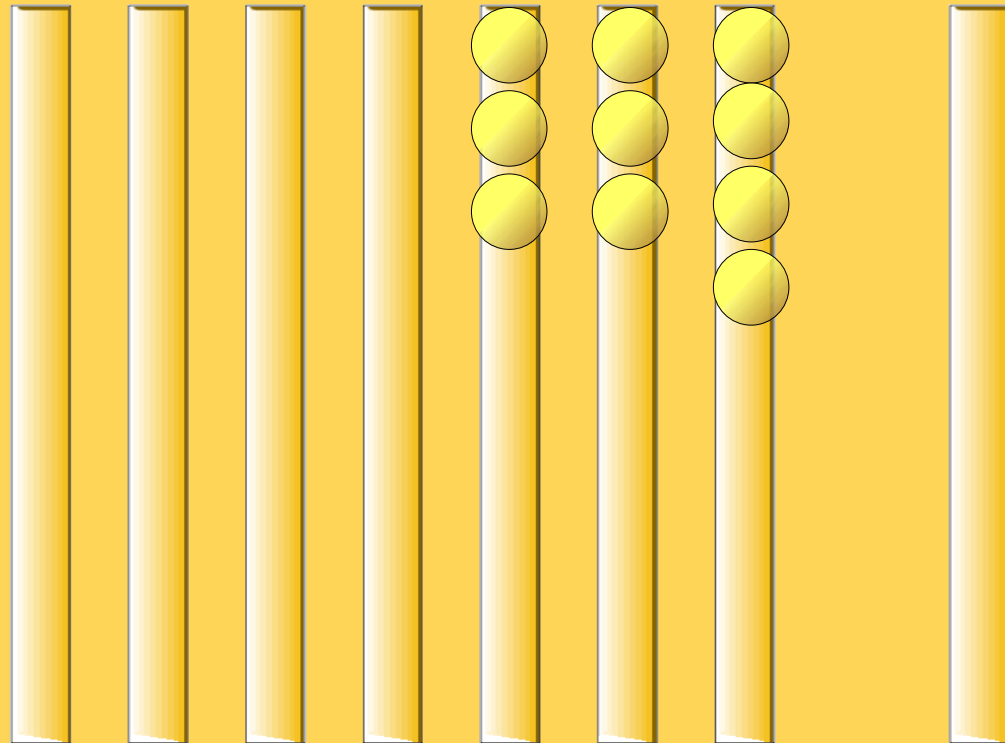
CCXI

SUMMA

D D D L V



X C C C C X I O



S

C

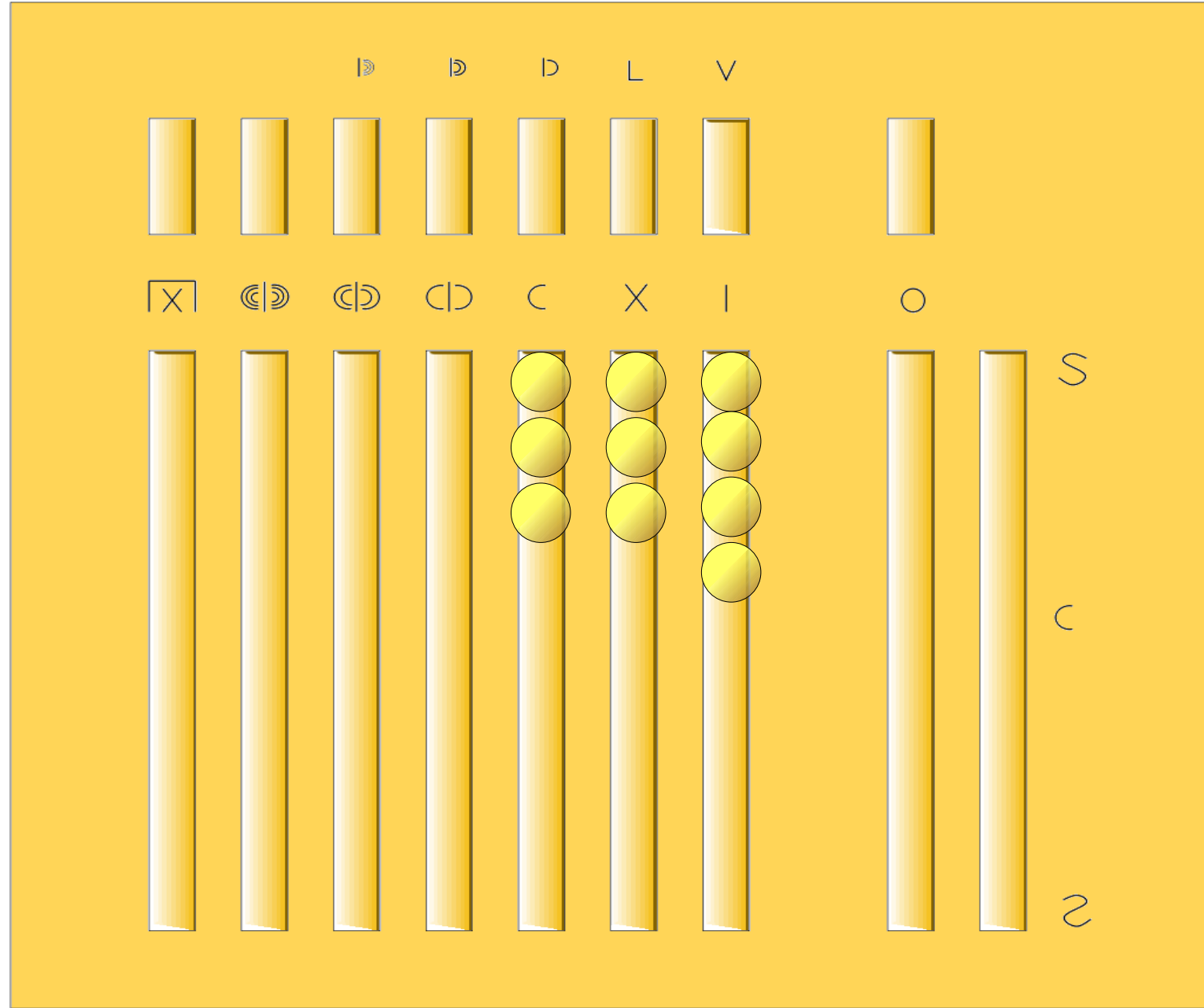
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CCCXXXIII ←



SUMMA

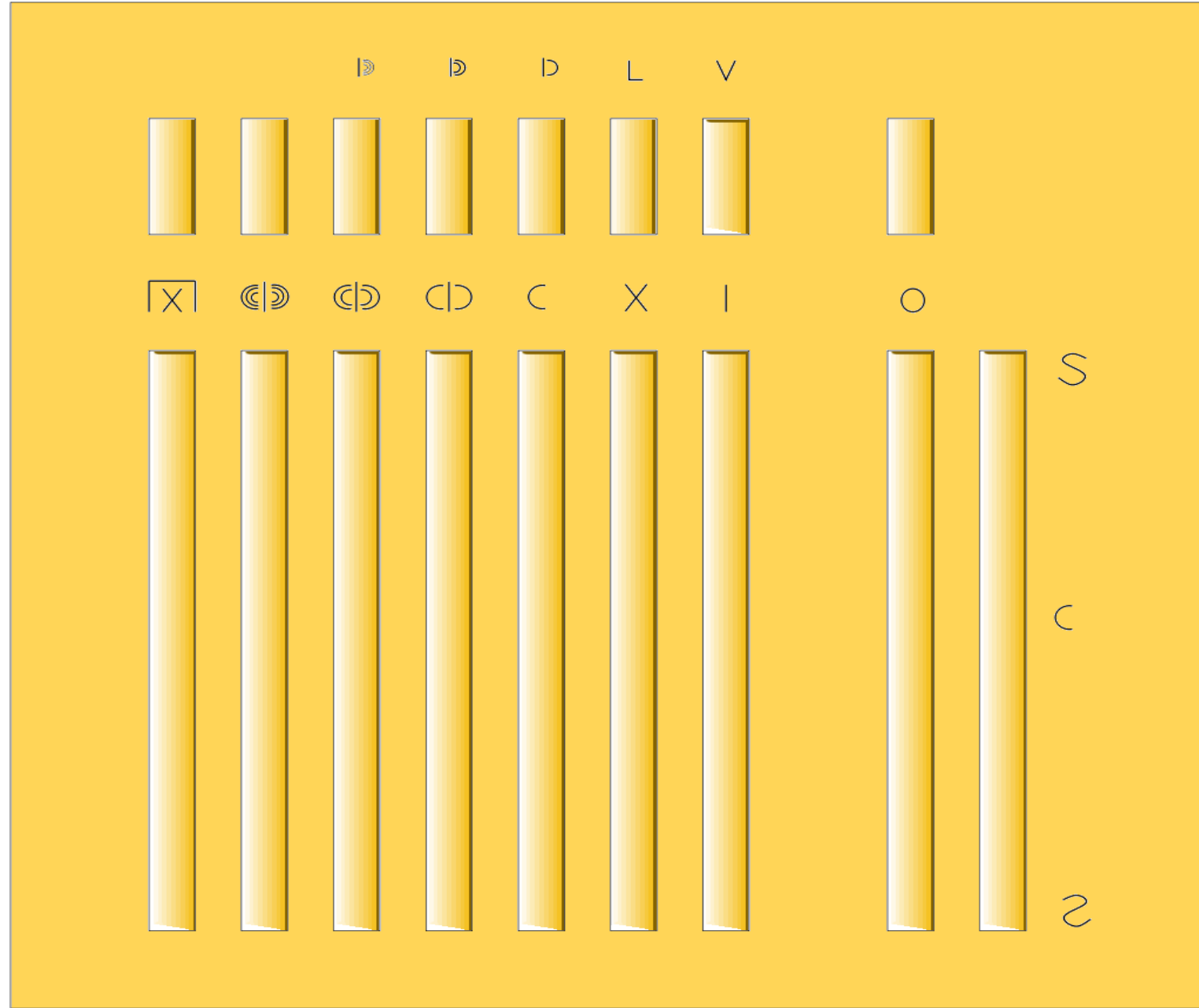
CCCXXIII
CCCXXIV



SUMMA

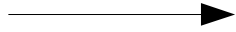
CLVI

CLII

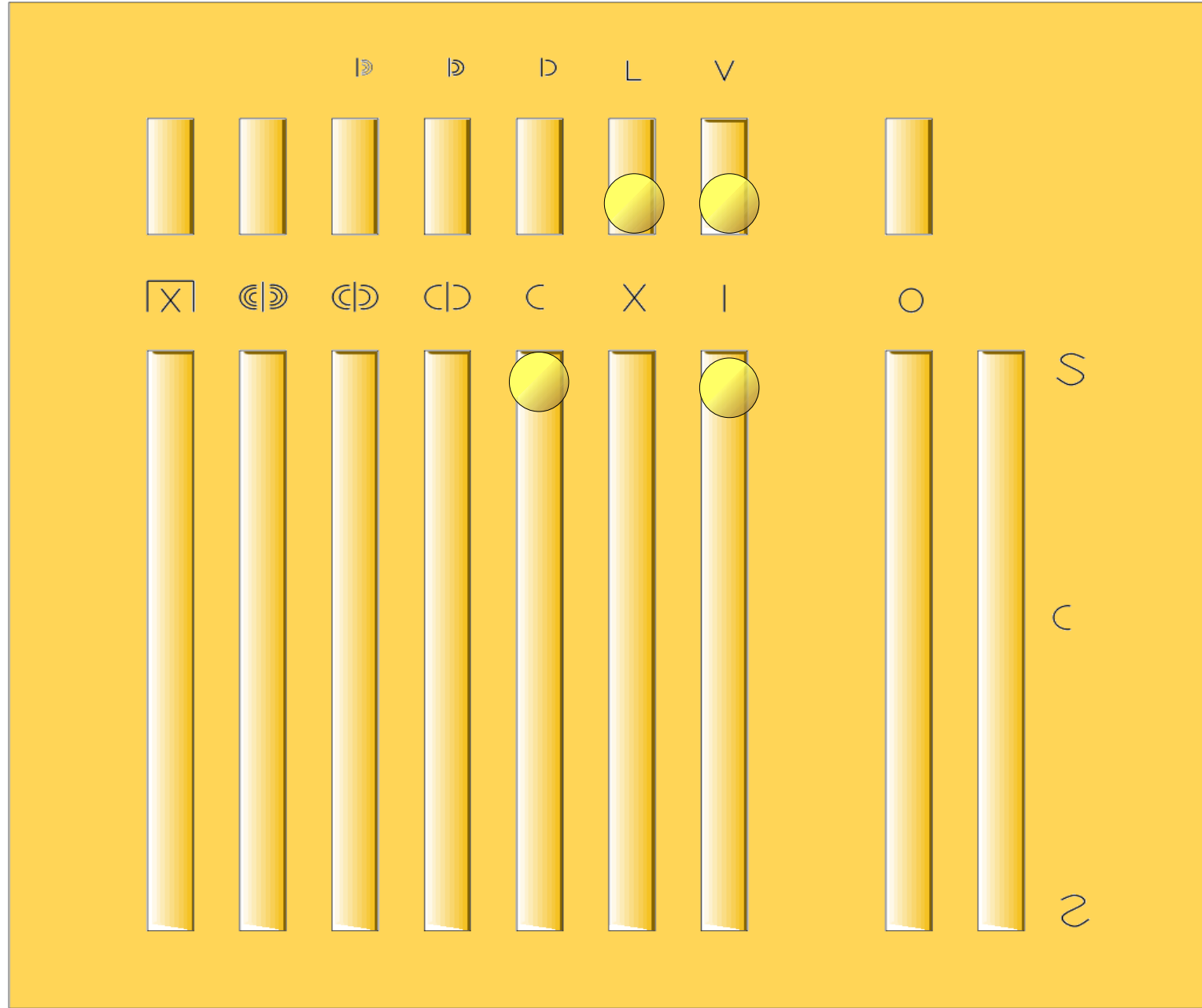


SUMMA

CLVI



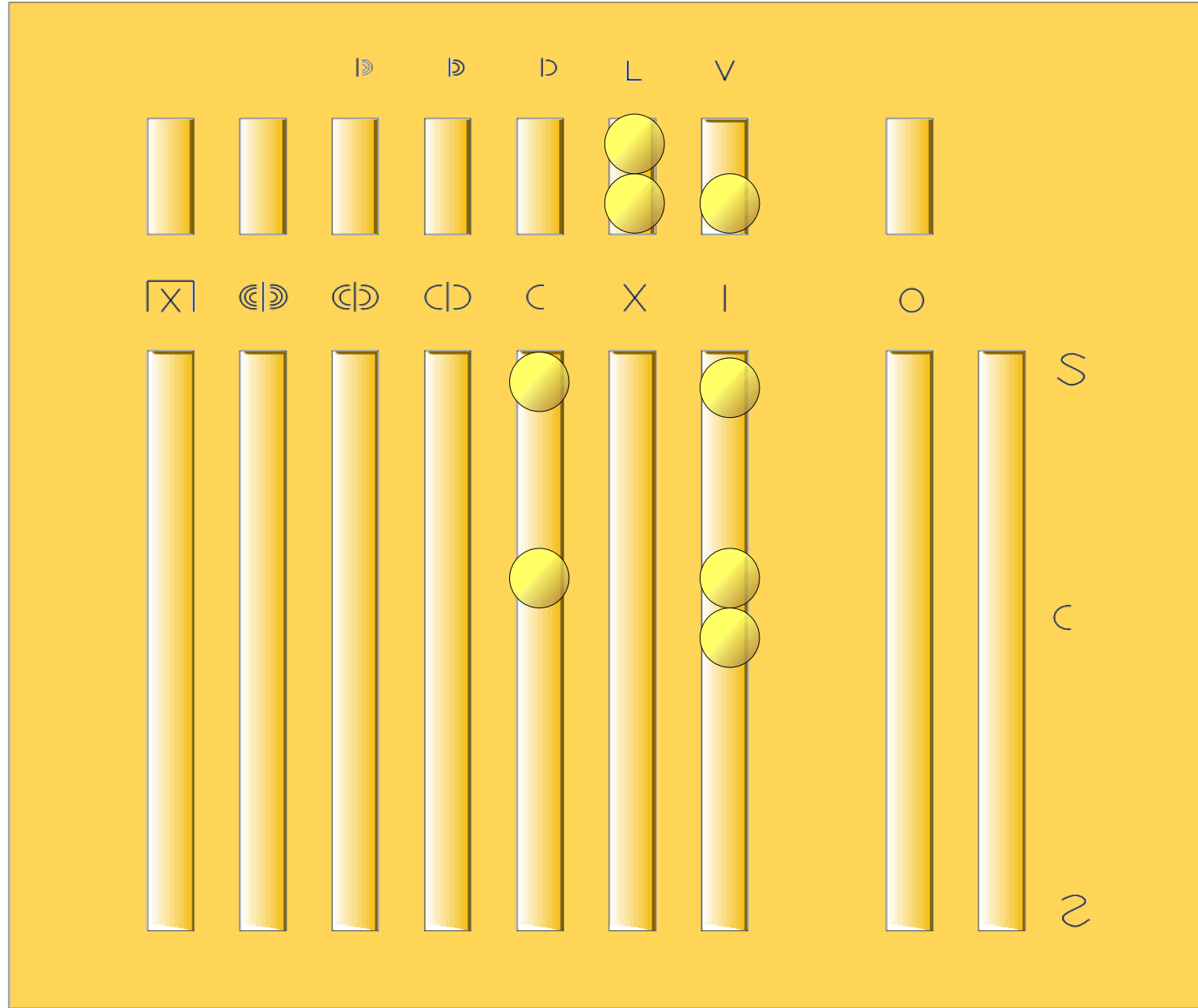
CLII



SUMMA

CLVI

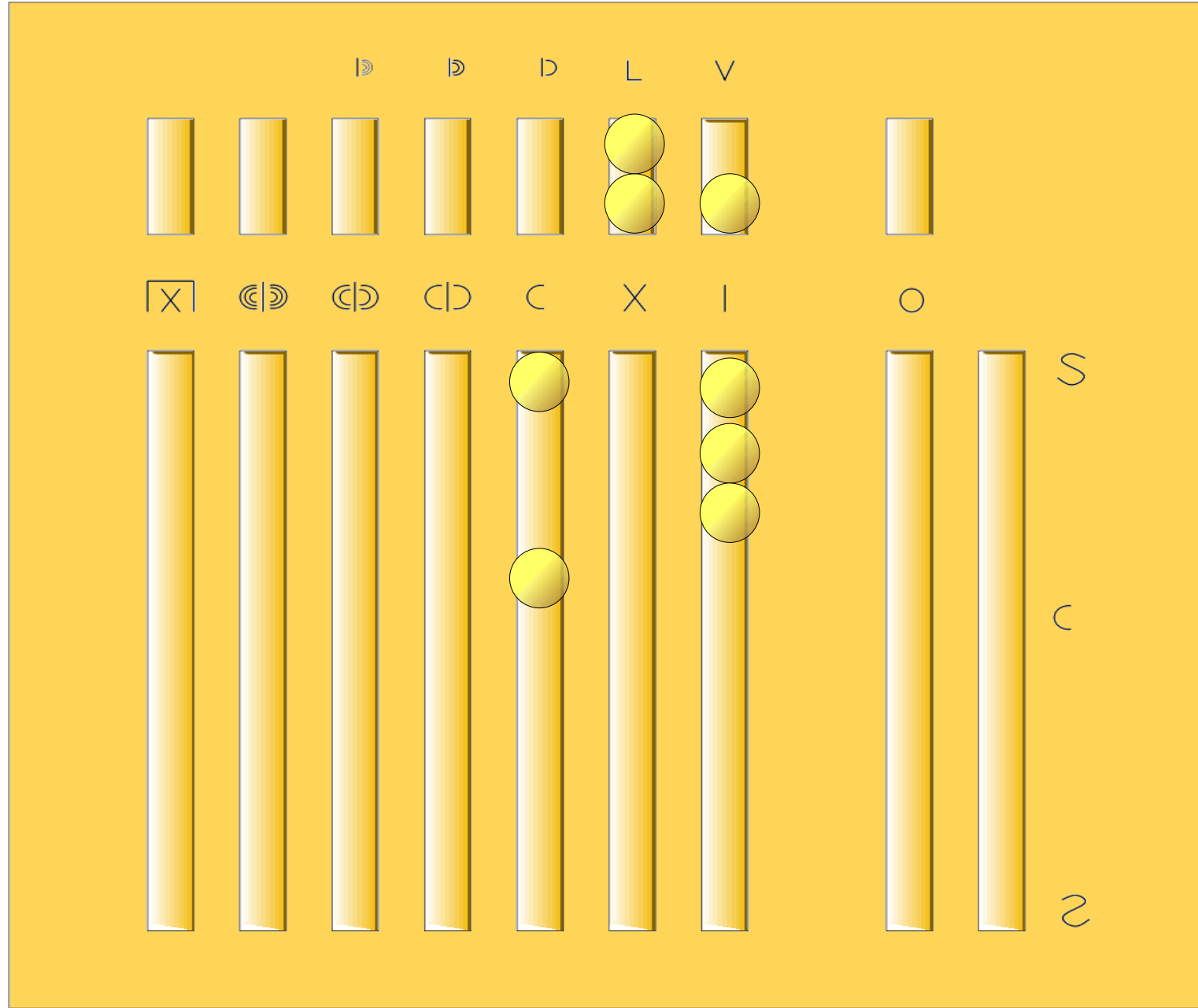
CLII



SUMMA

CLVI

CLII



S

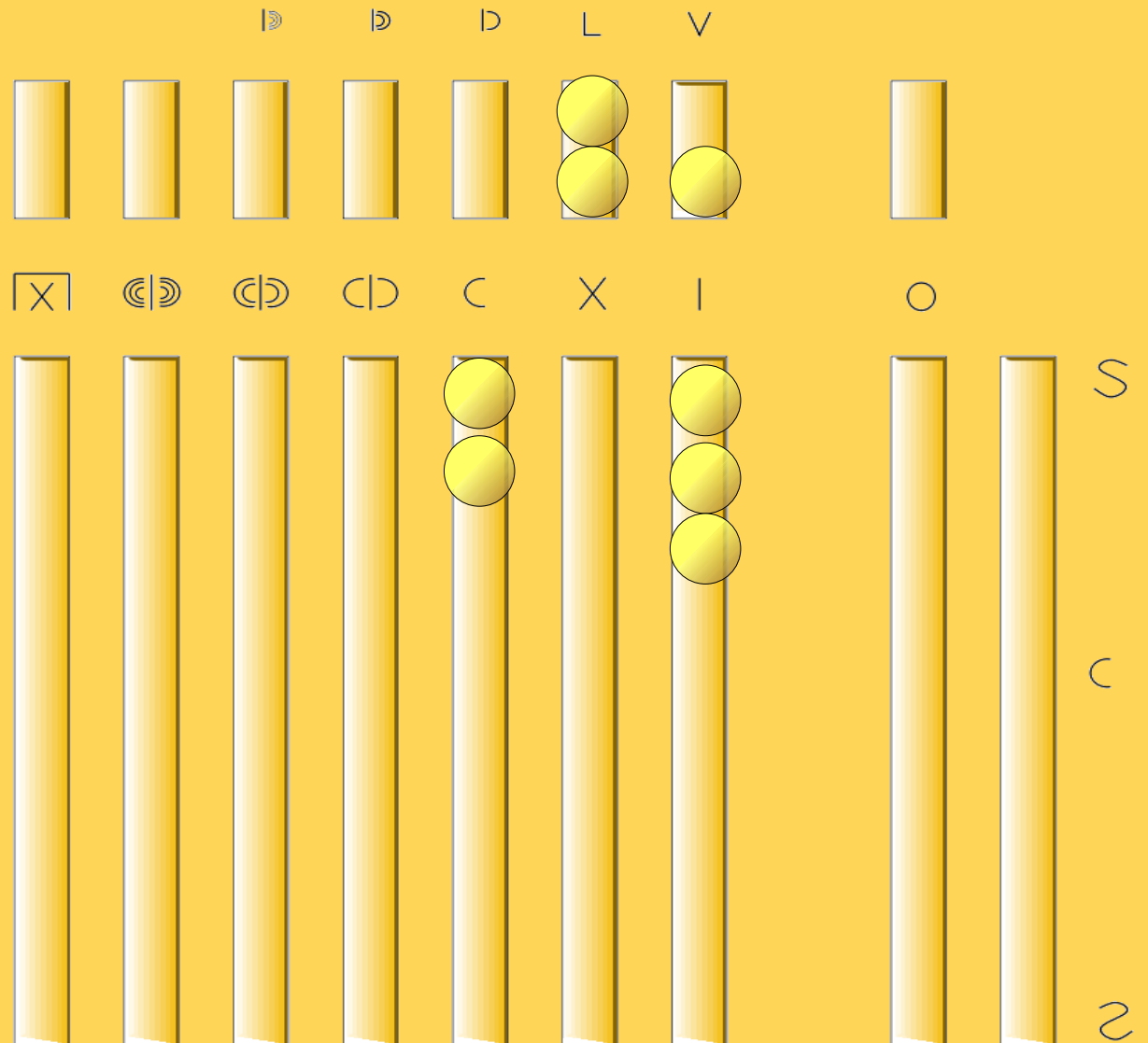
C

2

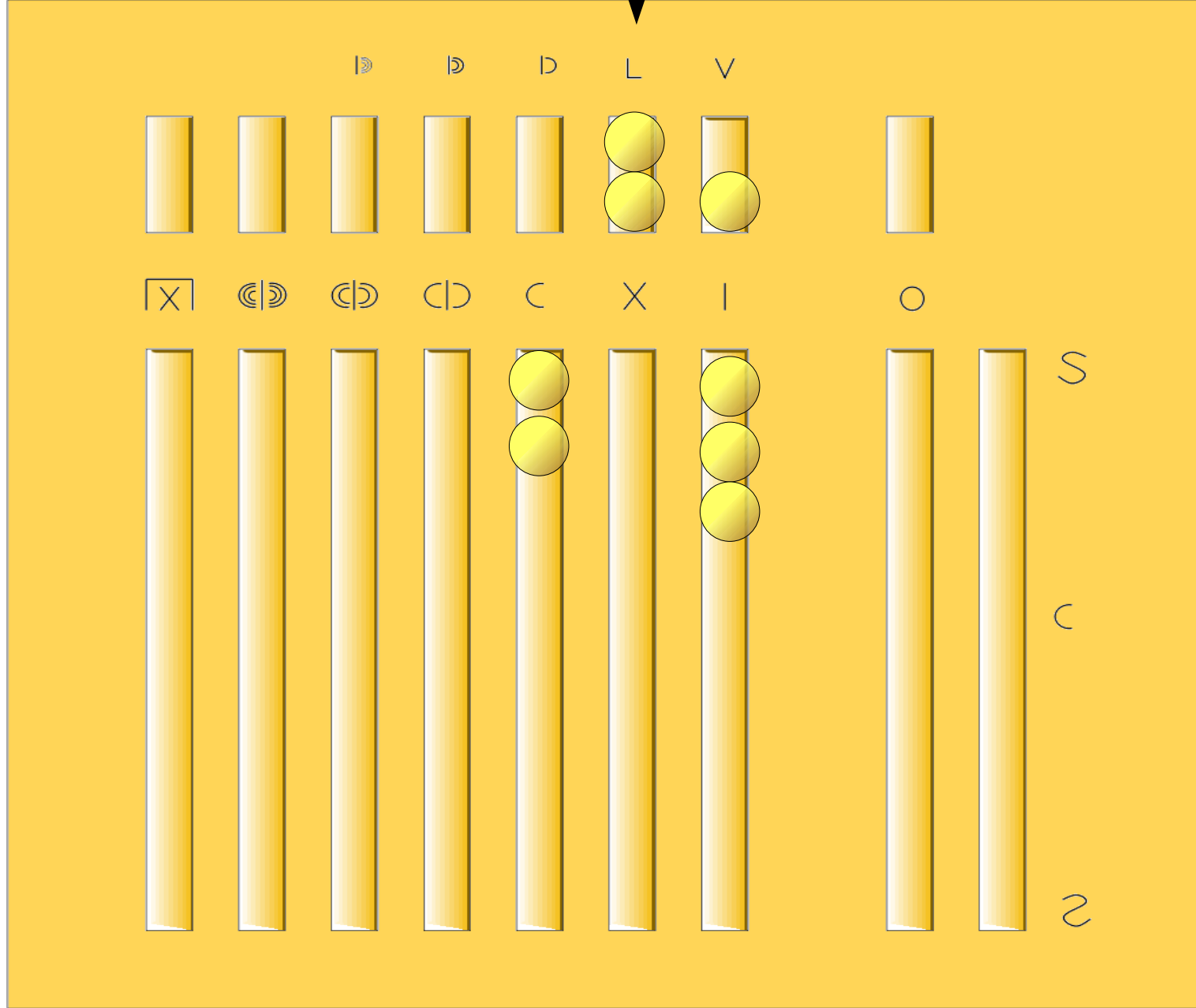
SUMMA

CLVI

CLII



SUMMA

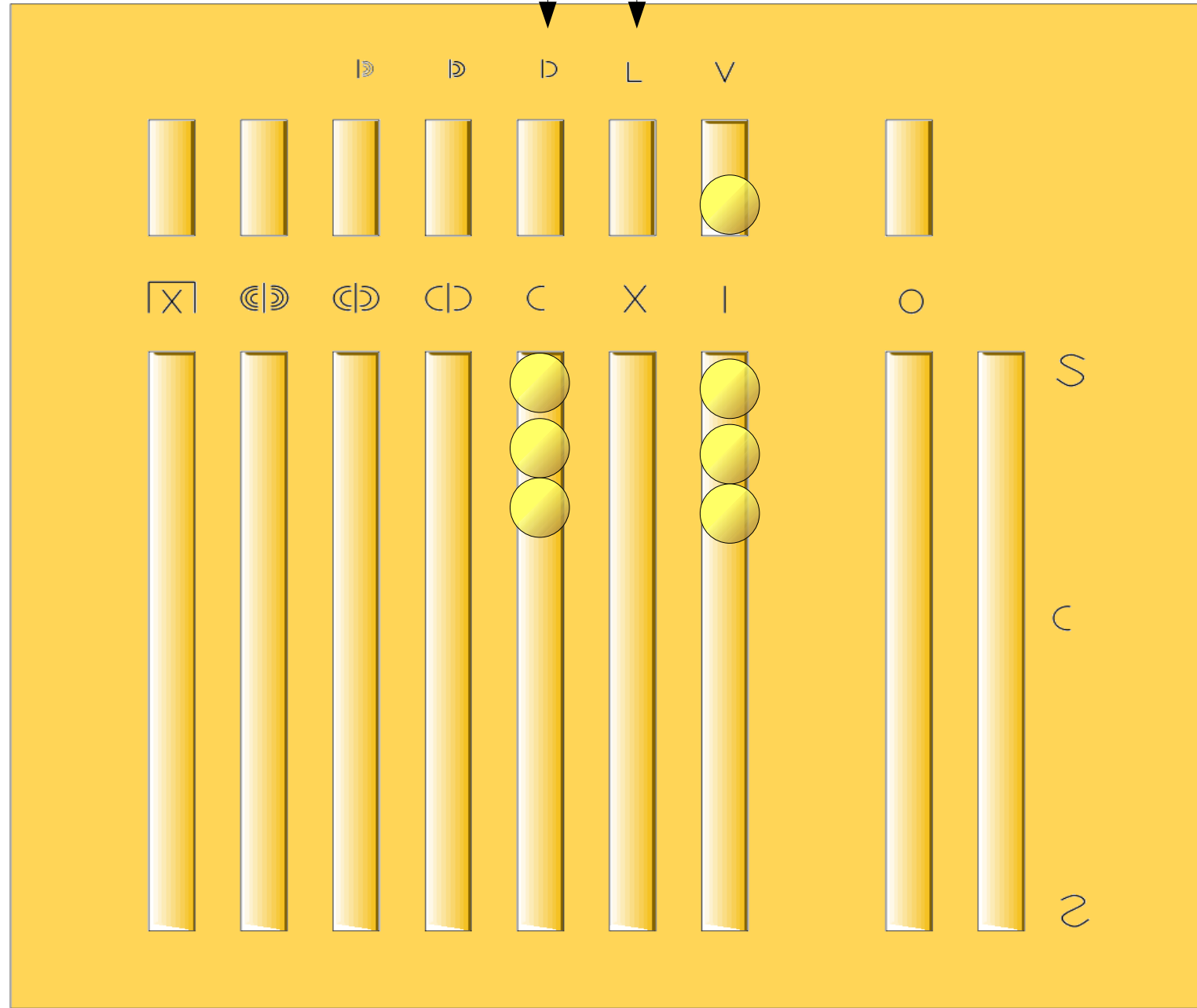


CLVI

CLII

SUMMA

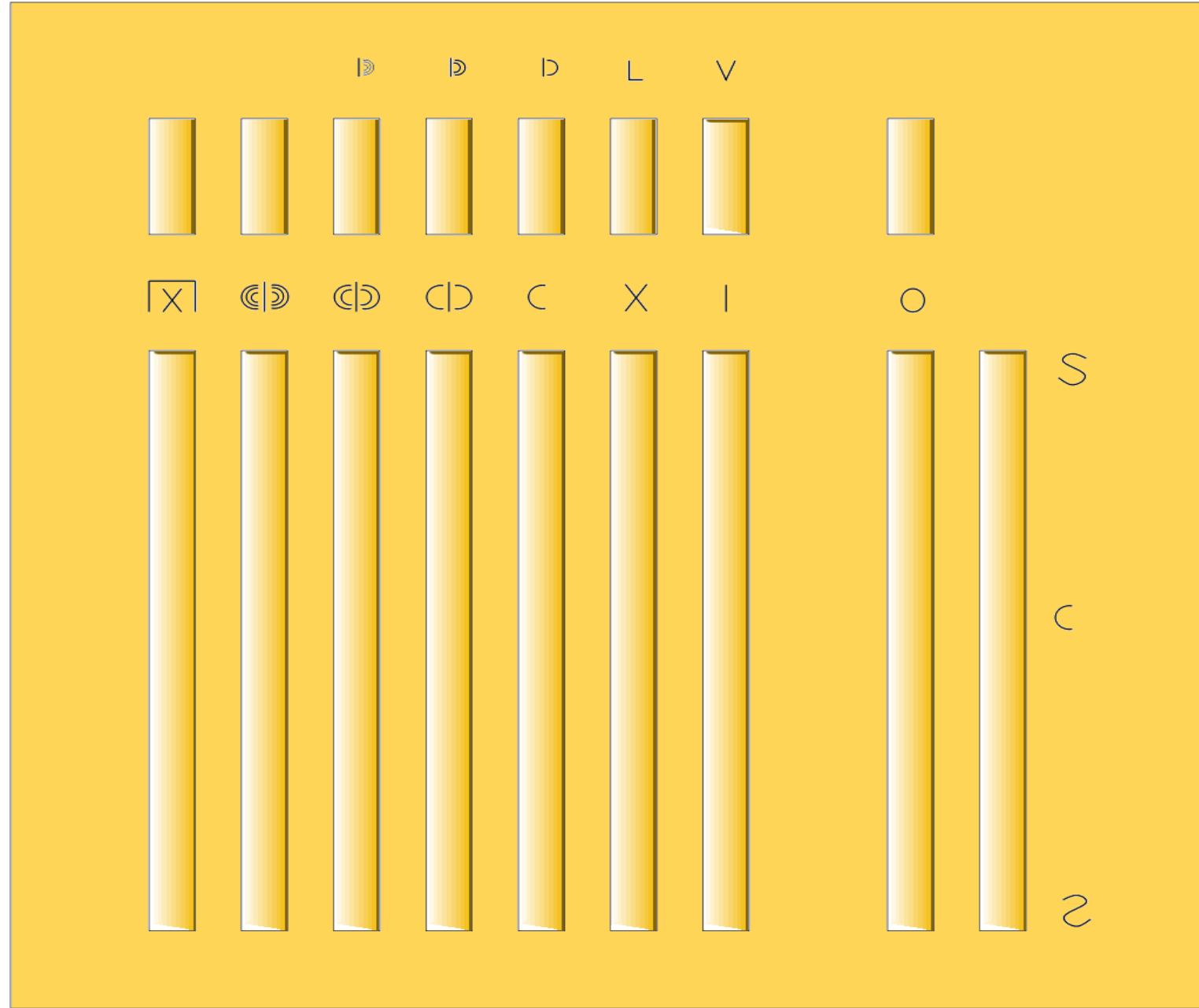
CCCVIII



SUMMA

MDCVI

MMMCCXI

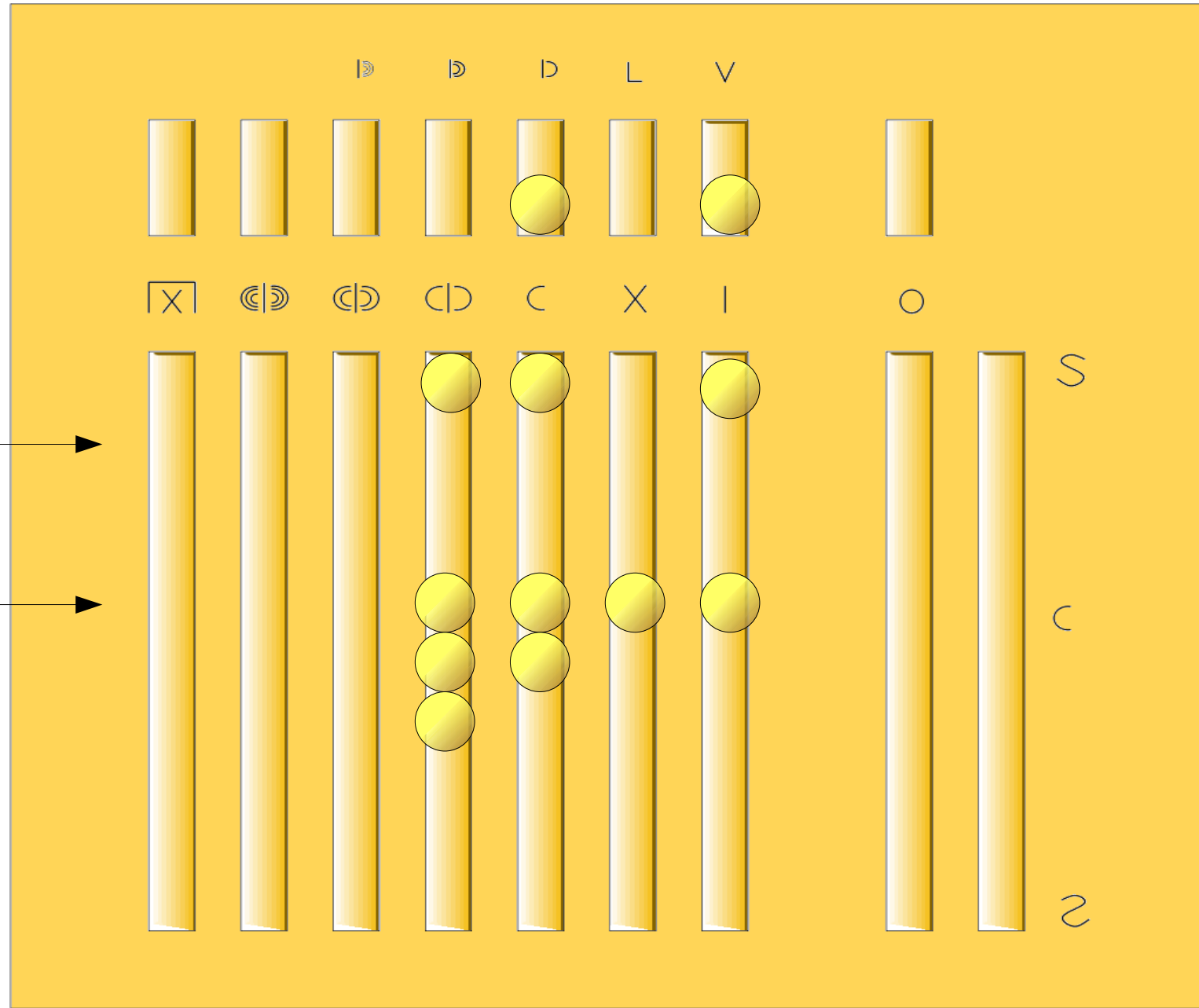


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MDCVI

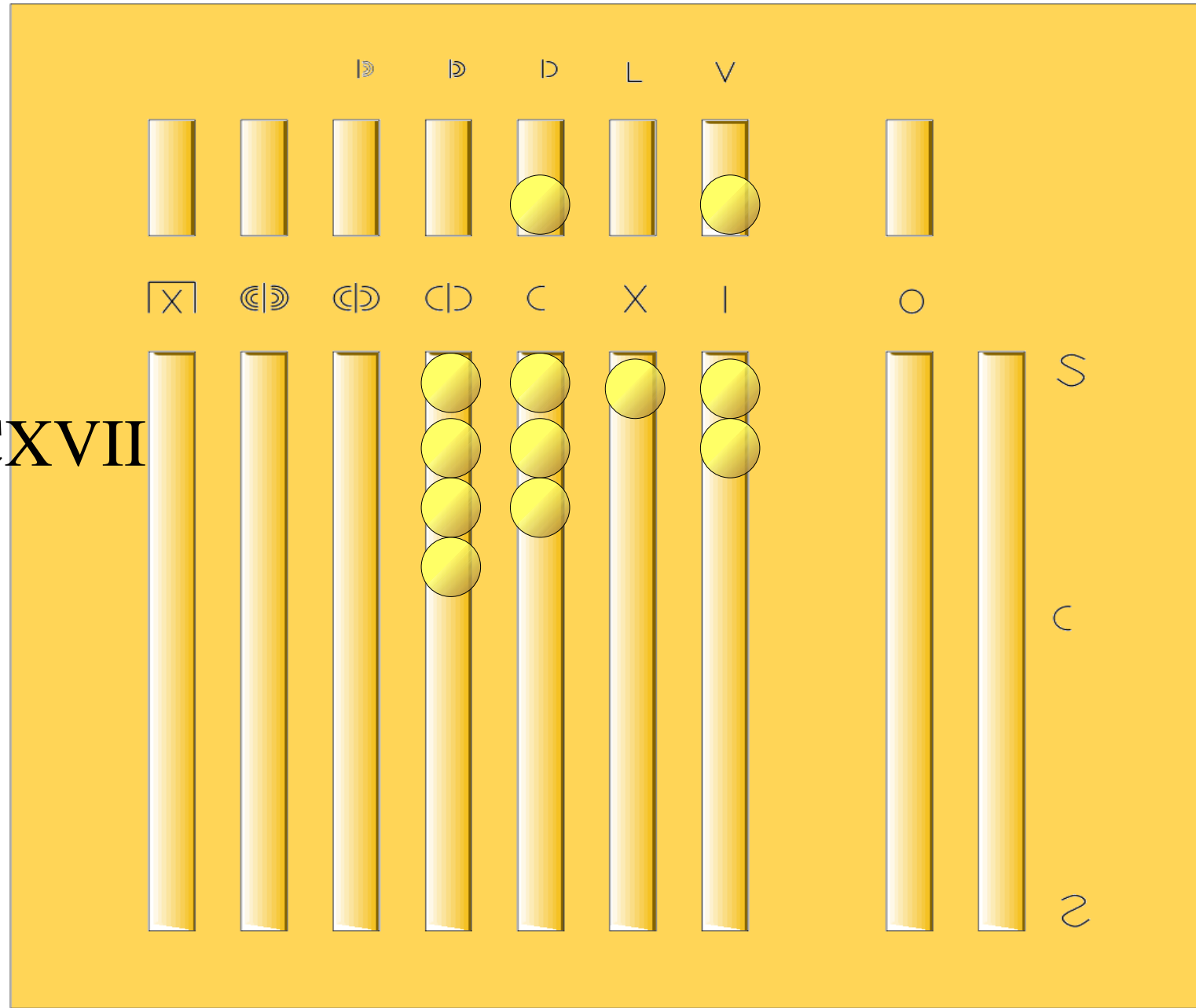


MMMCCXI



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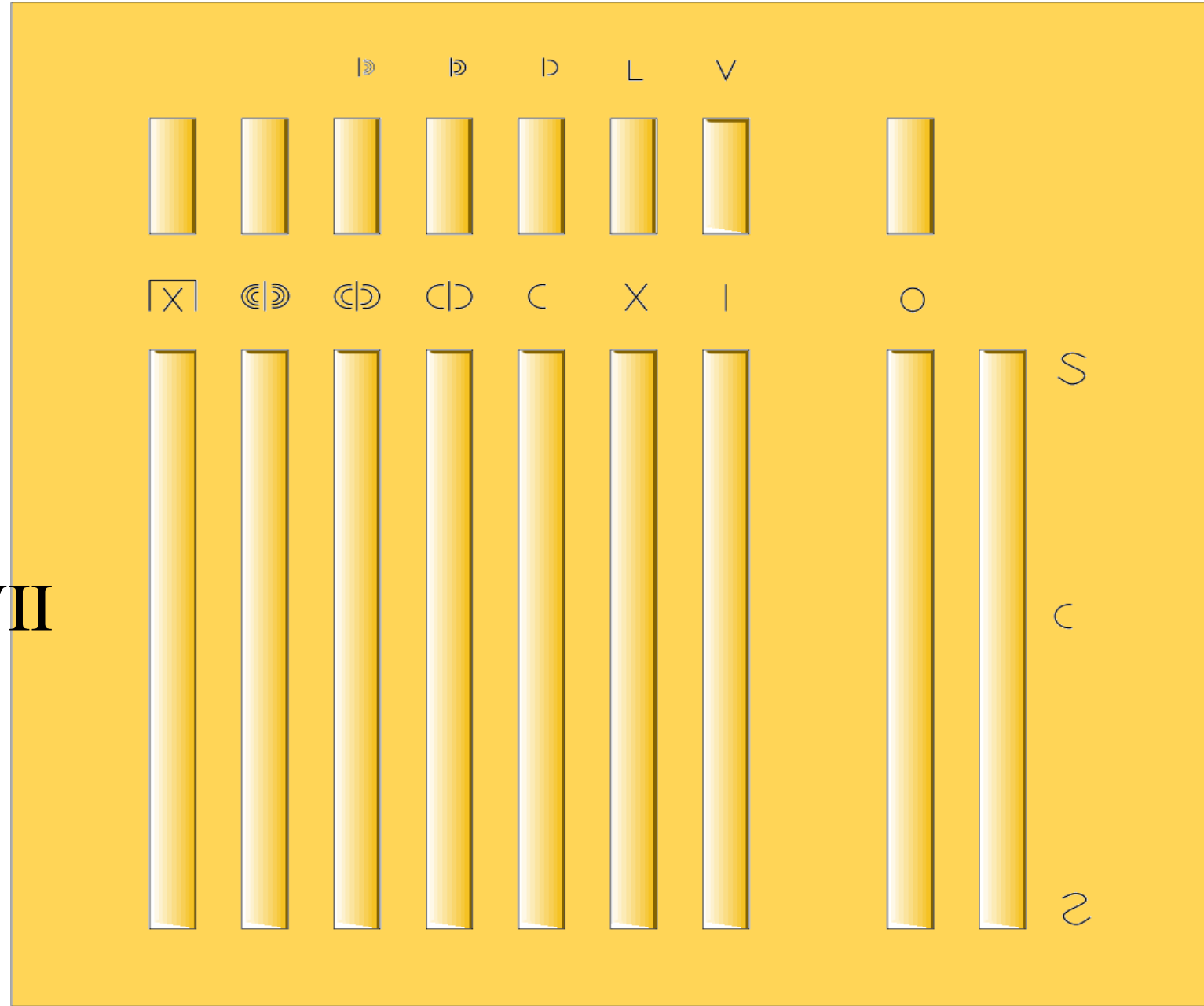
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SUMMA

MMDCXXVI

MMMCCCXVII

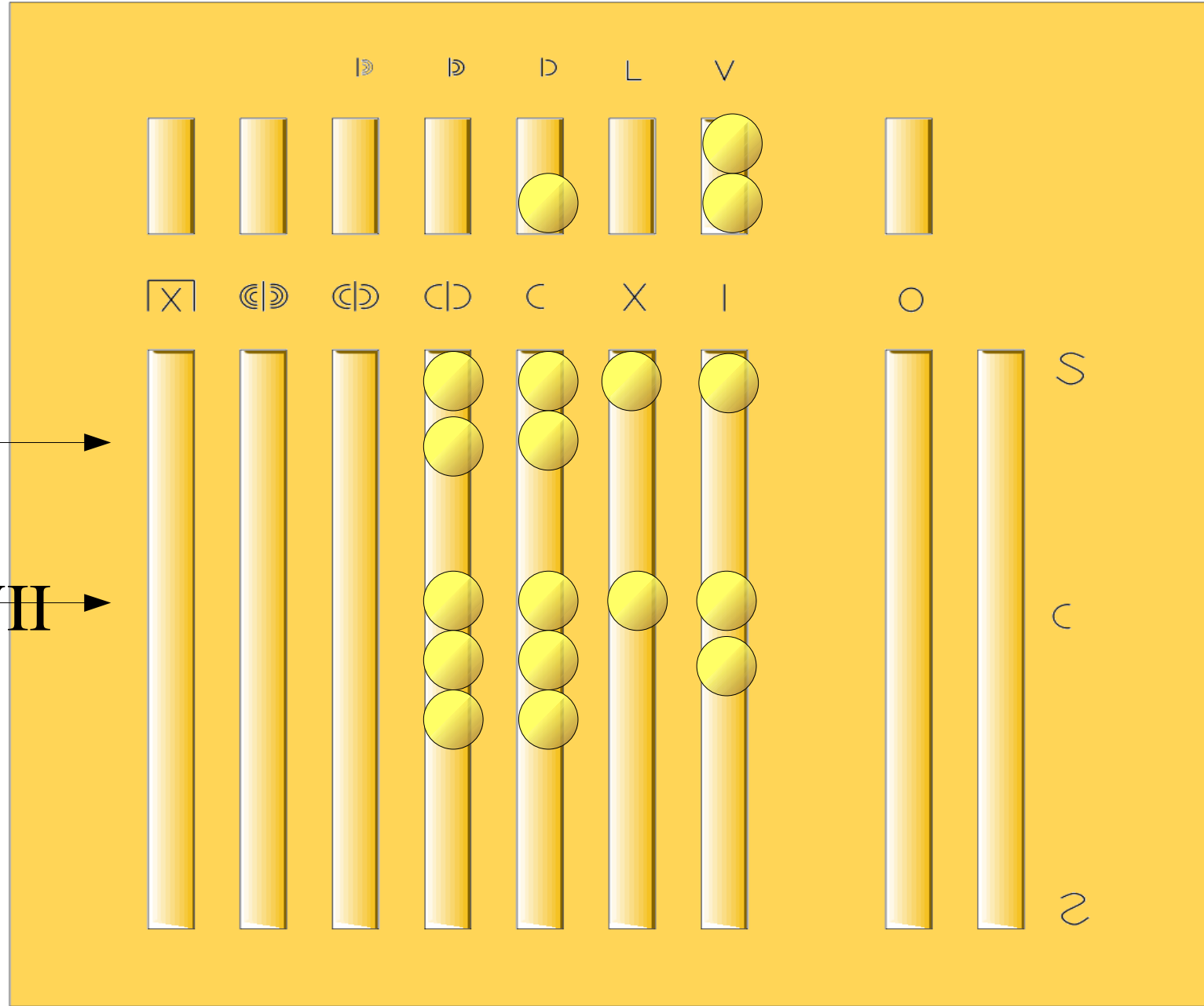


SUMMA

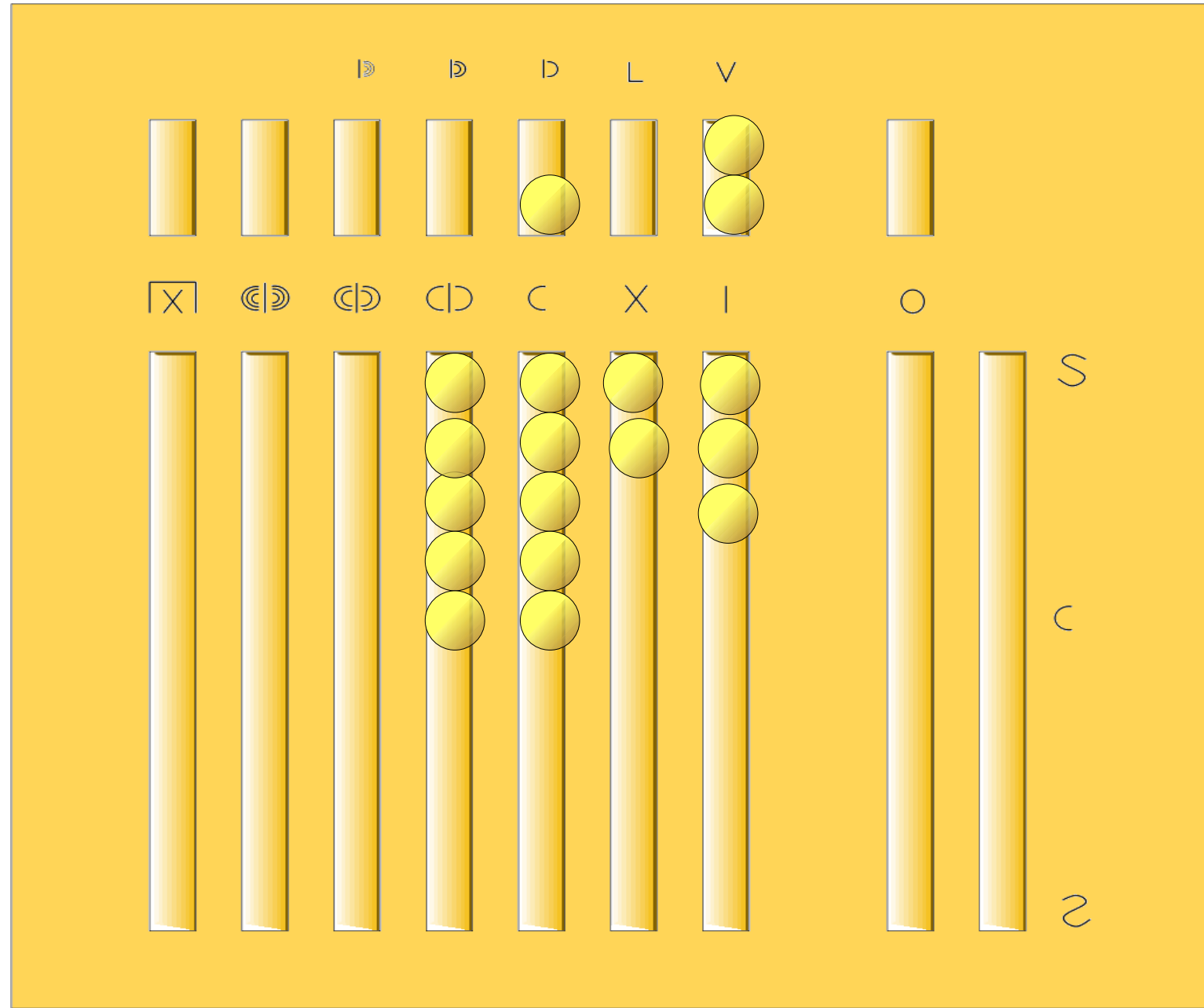
MMDCXXVI



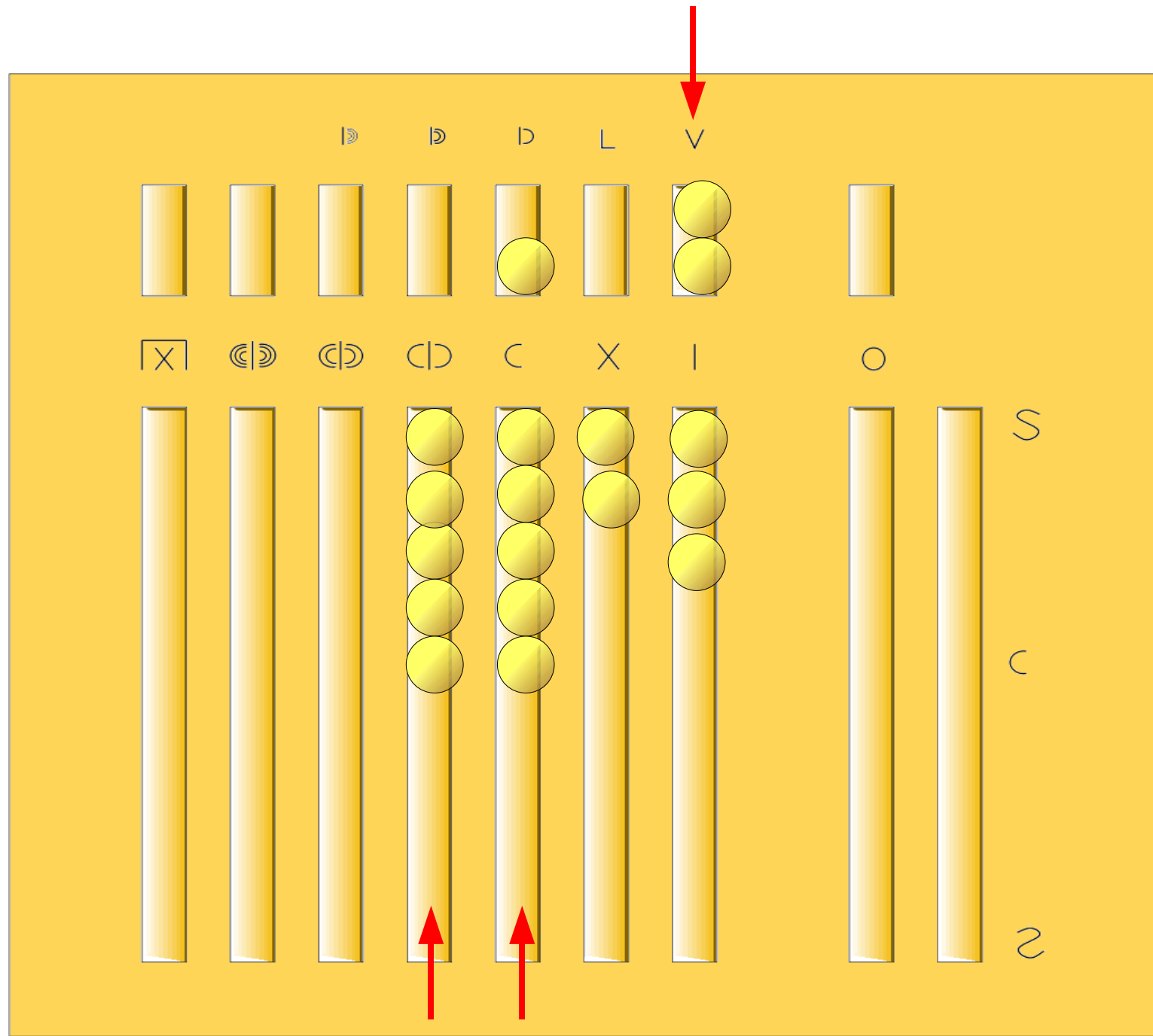
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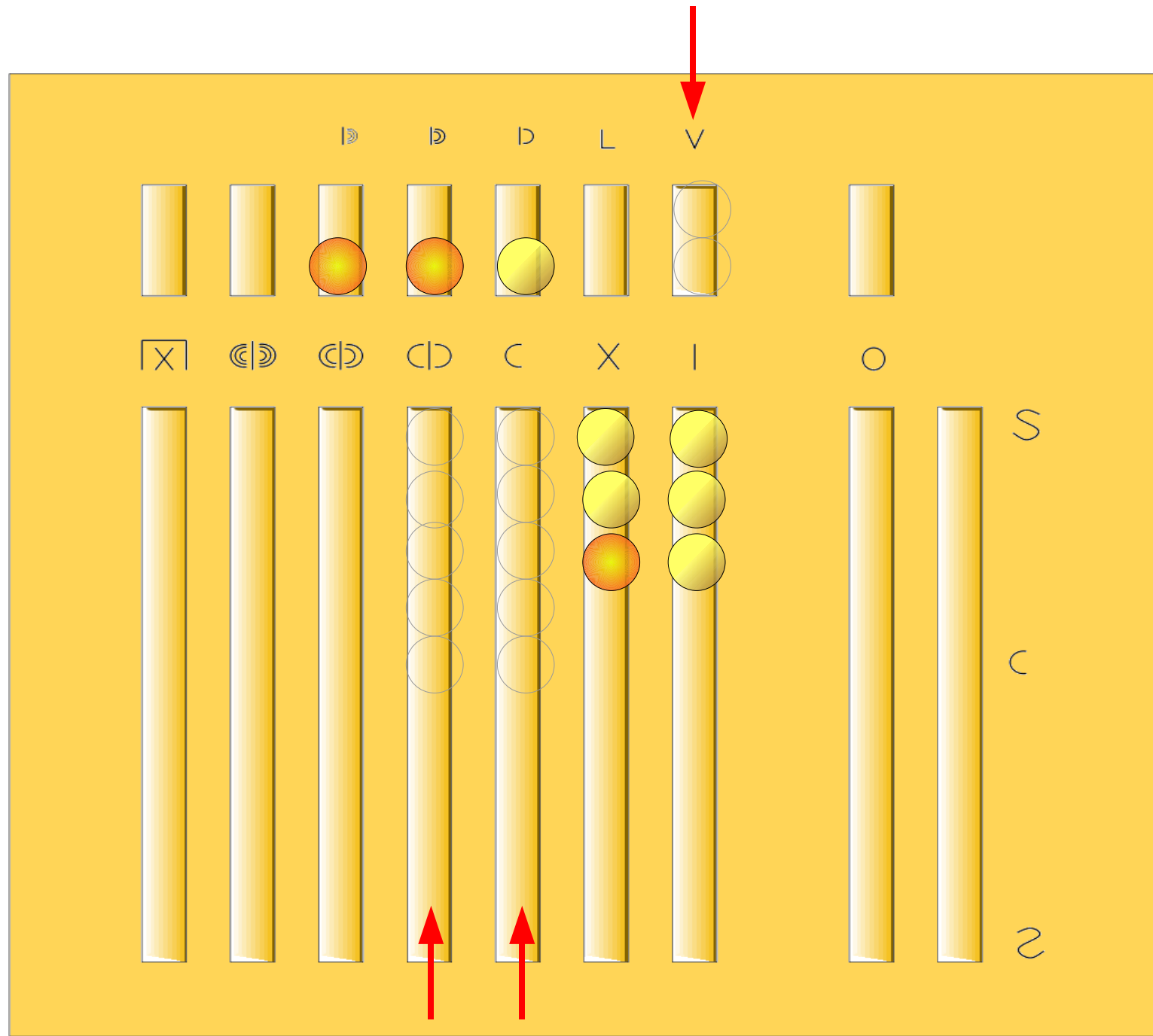
SUMMA



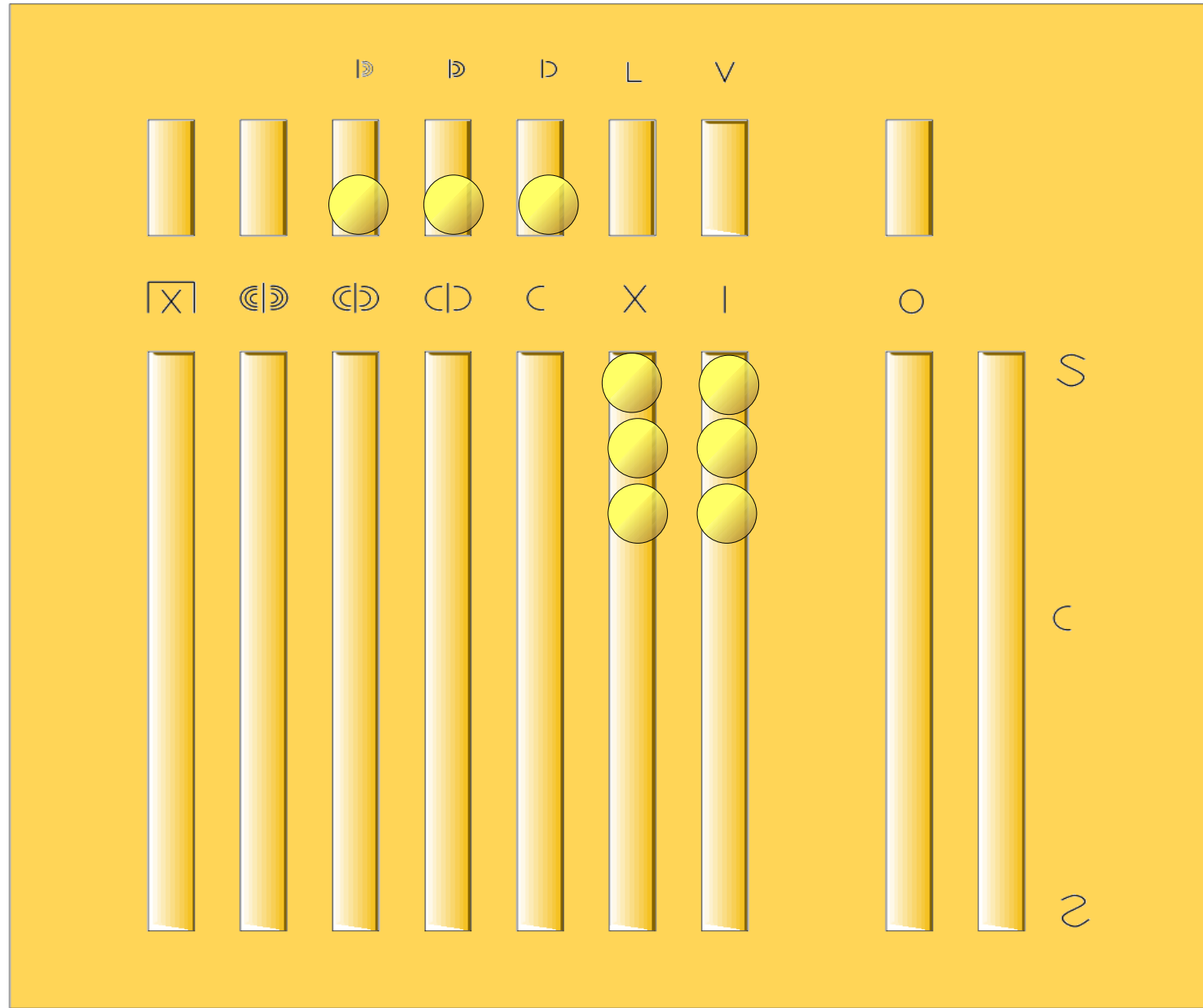
SUMMA



SUMMA

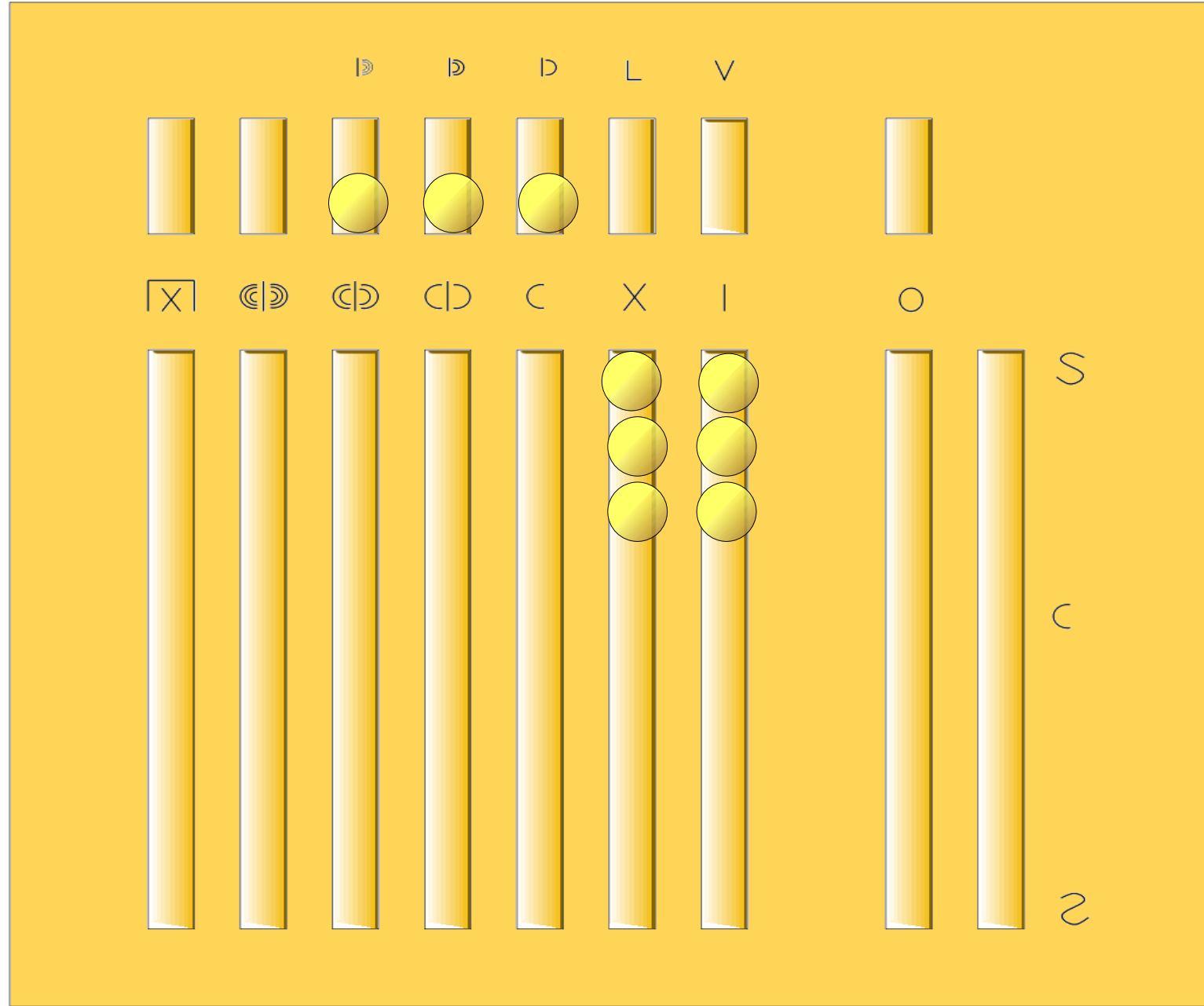


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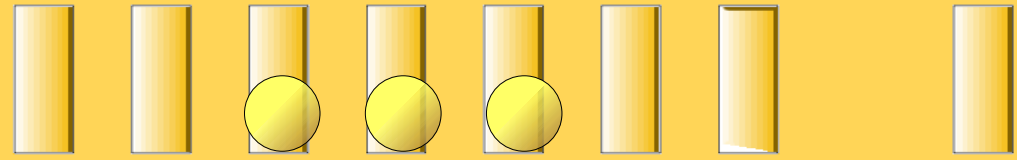


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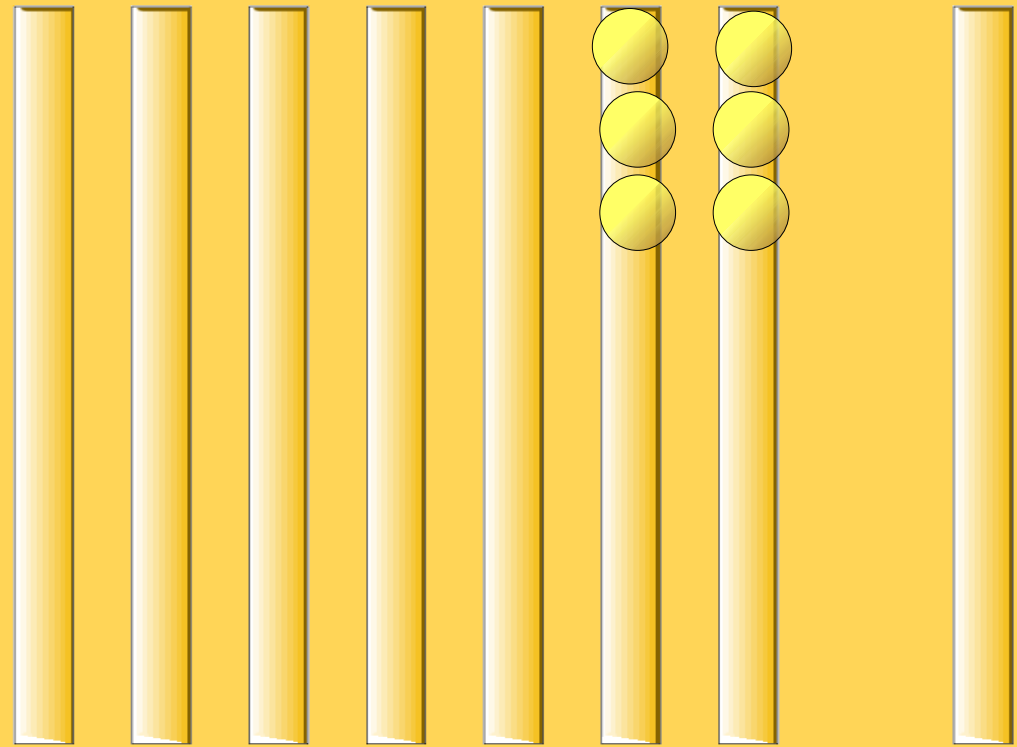
DDD XXXIII



D D D L V



X CD CD C X I O



S

C

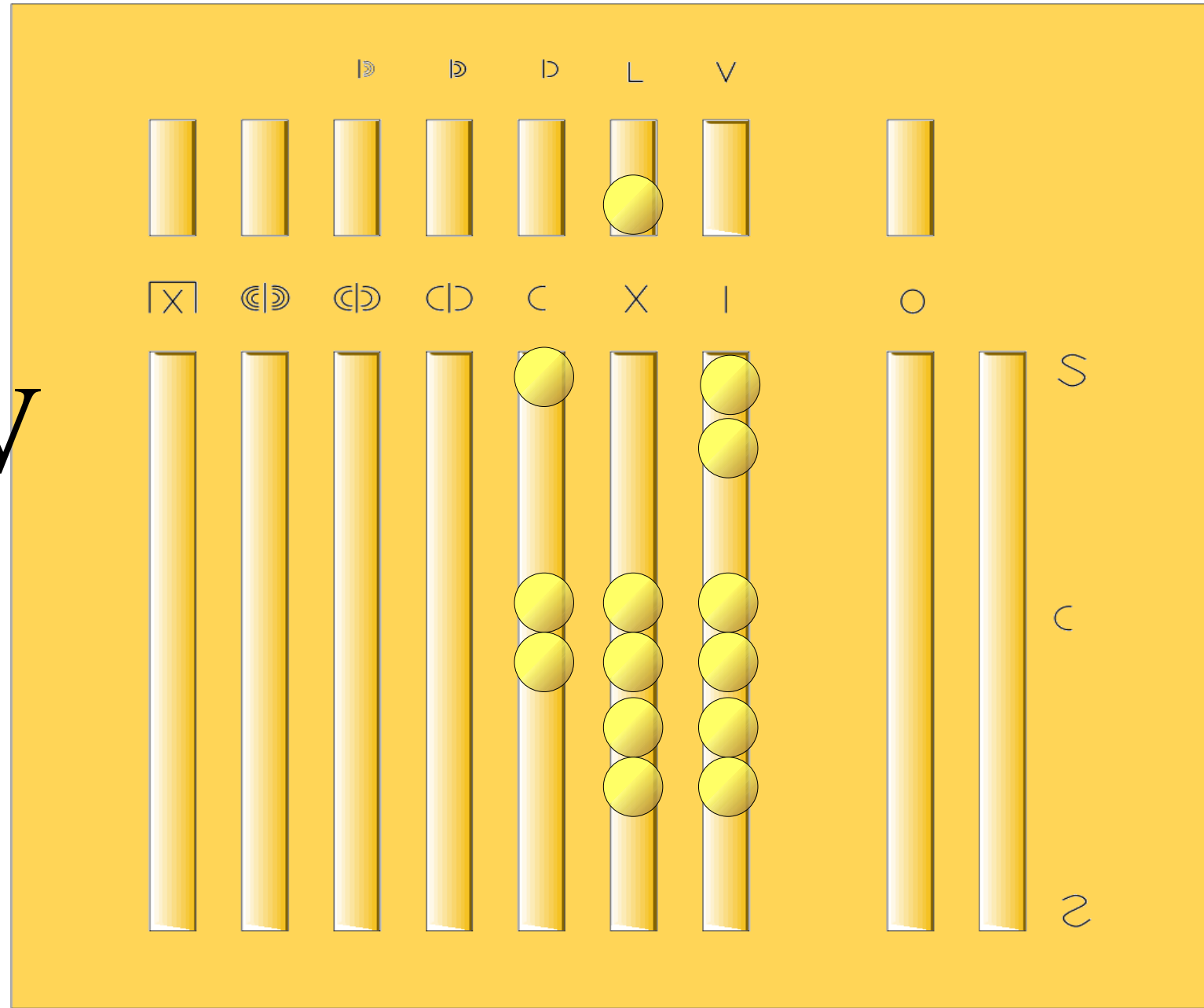
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SUMMA

Attenzione
alla notazione
sottrattiva

CLII

CCXLIV

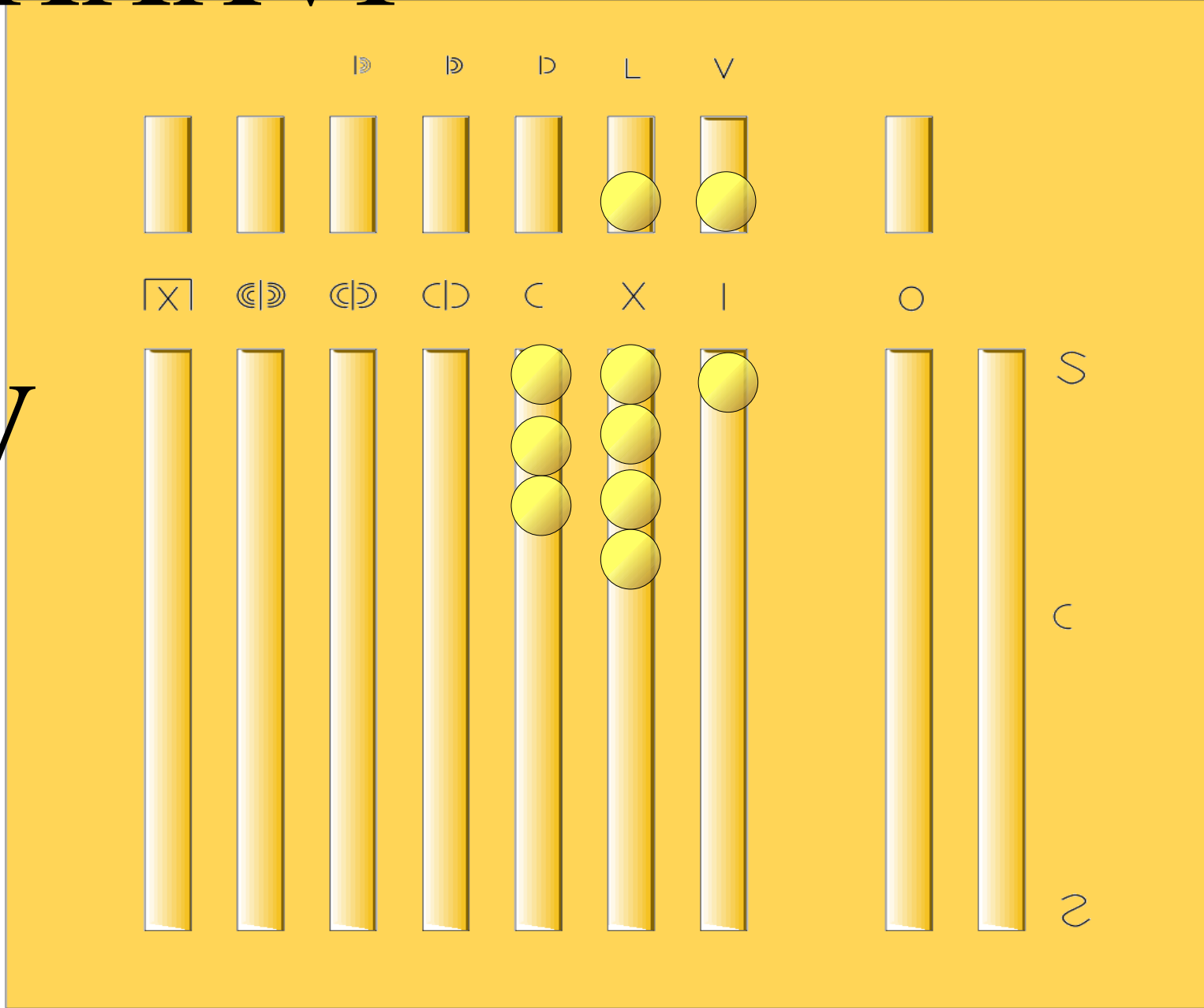


SUMMA

CCCLXXXVI

CLII

CCXLIV

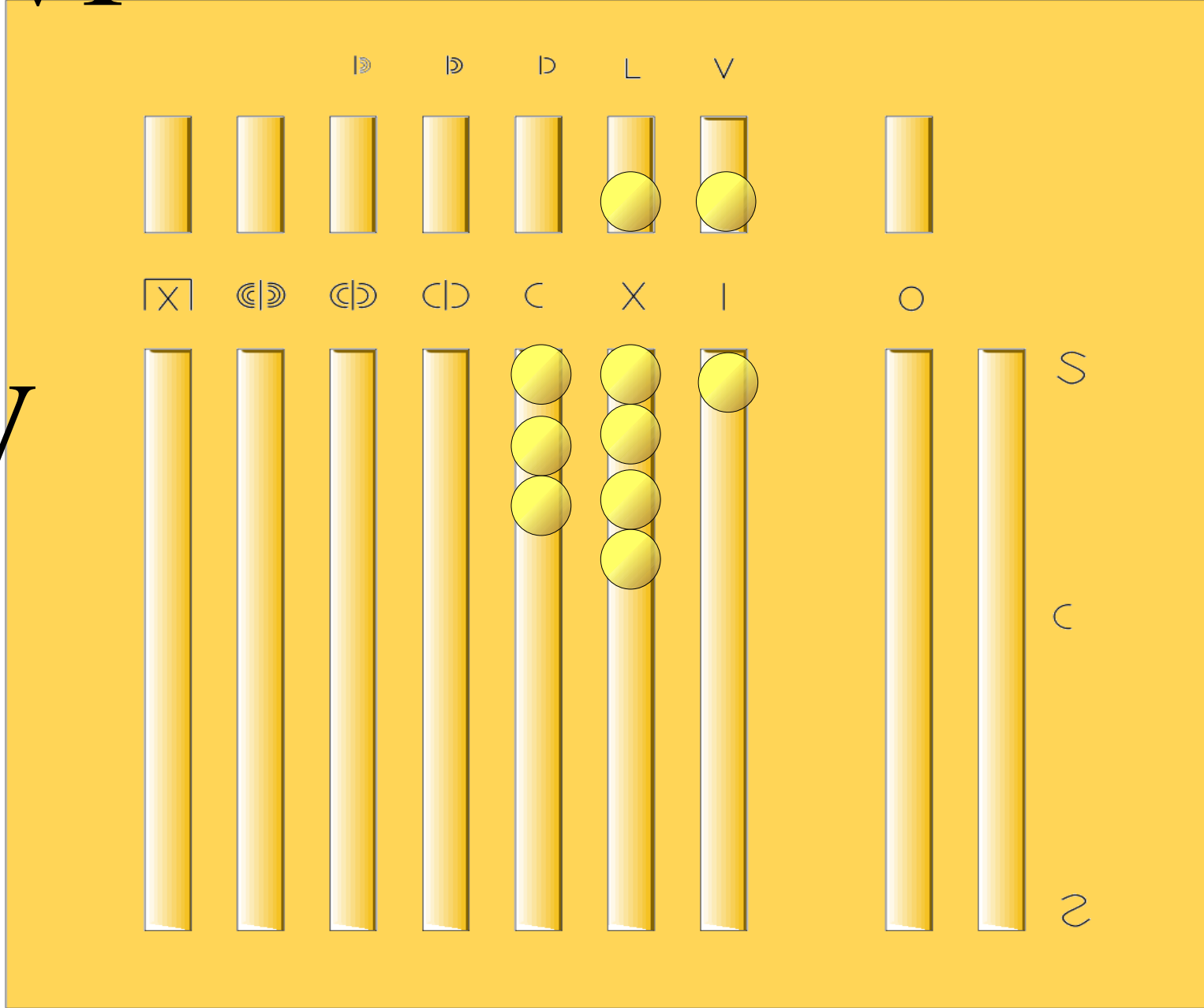


SUMMA

CCCXCVI

CLII

CCXLIV



SUMMA

CXXIII

CCXI



SUMMA

C	XX	III
CC	X	I



SUMMA

CCC XXX III

C XX III

CC X I



SUMMA

CLVI

CLII



SUMMA

C L V I

C L II



SUMMA

CC LL V III

C L V I

C L II



SUMMA

CCC V III

C L V I

C L II



SUMMA

CCXLIV

CLII



SUMMA

CC X L I V

C L II

SUMMA

						II
<hr/>						
CC	X	L	I	V		
	C		L			II
						↑

SUMMA

				V	II
<hr/>					
CC	X	L	I	V	
C		L			II



SUMMA

				V	I
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CC	X	L	I	V	
	C		L		II



SUMMA

C				V	I
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CC	X	L	I	V	
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SUMMA

C				V	I
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C		L			II

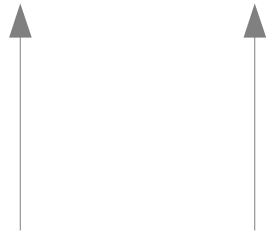


SUMMA

CC XC V I

CC X L I V

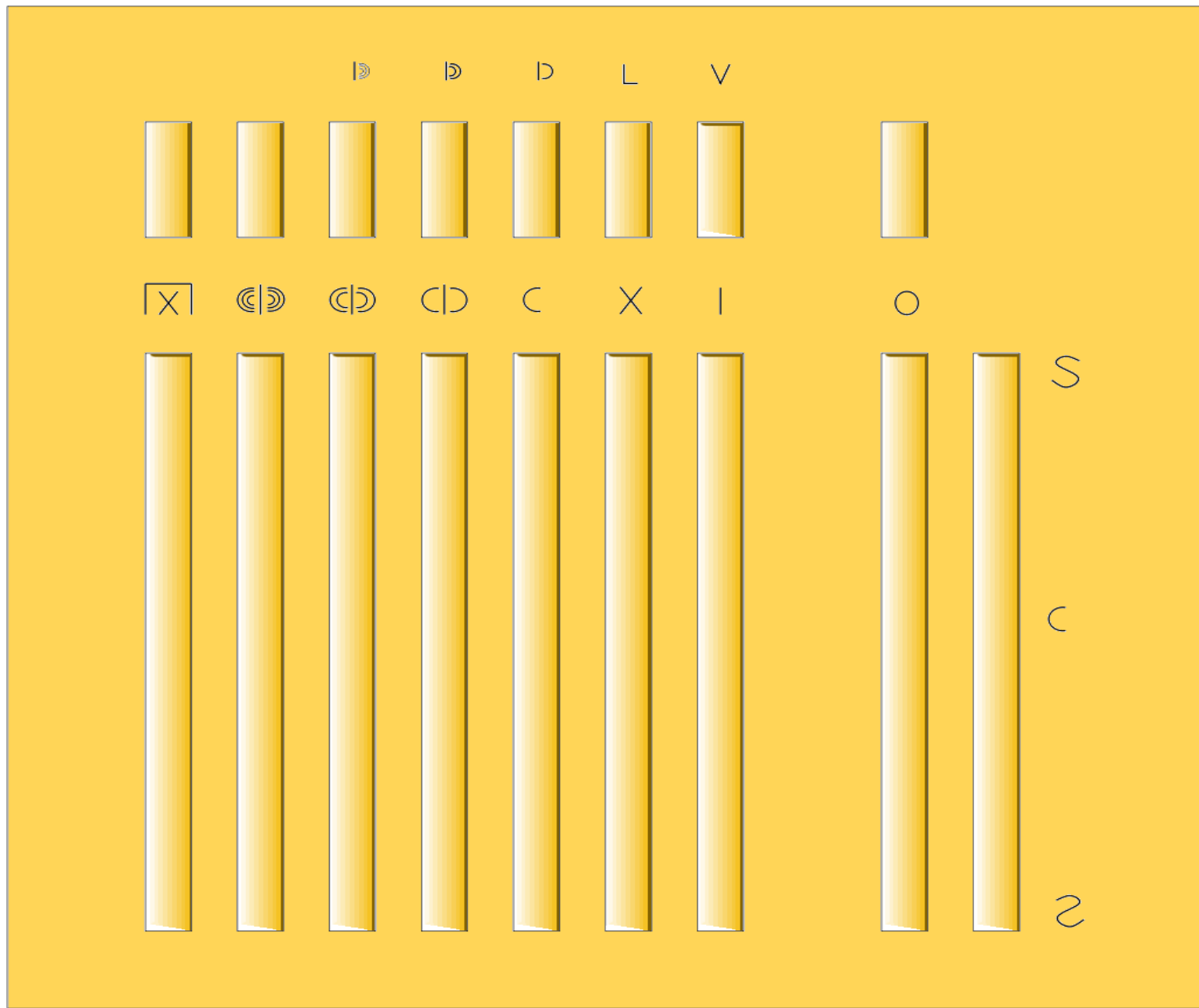
C L II



SUBTRACTIO

CCCXXXIII

CXXI

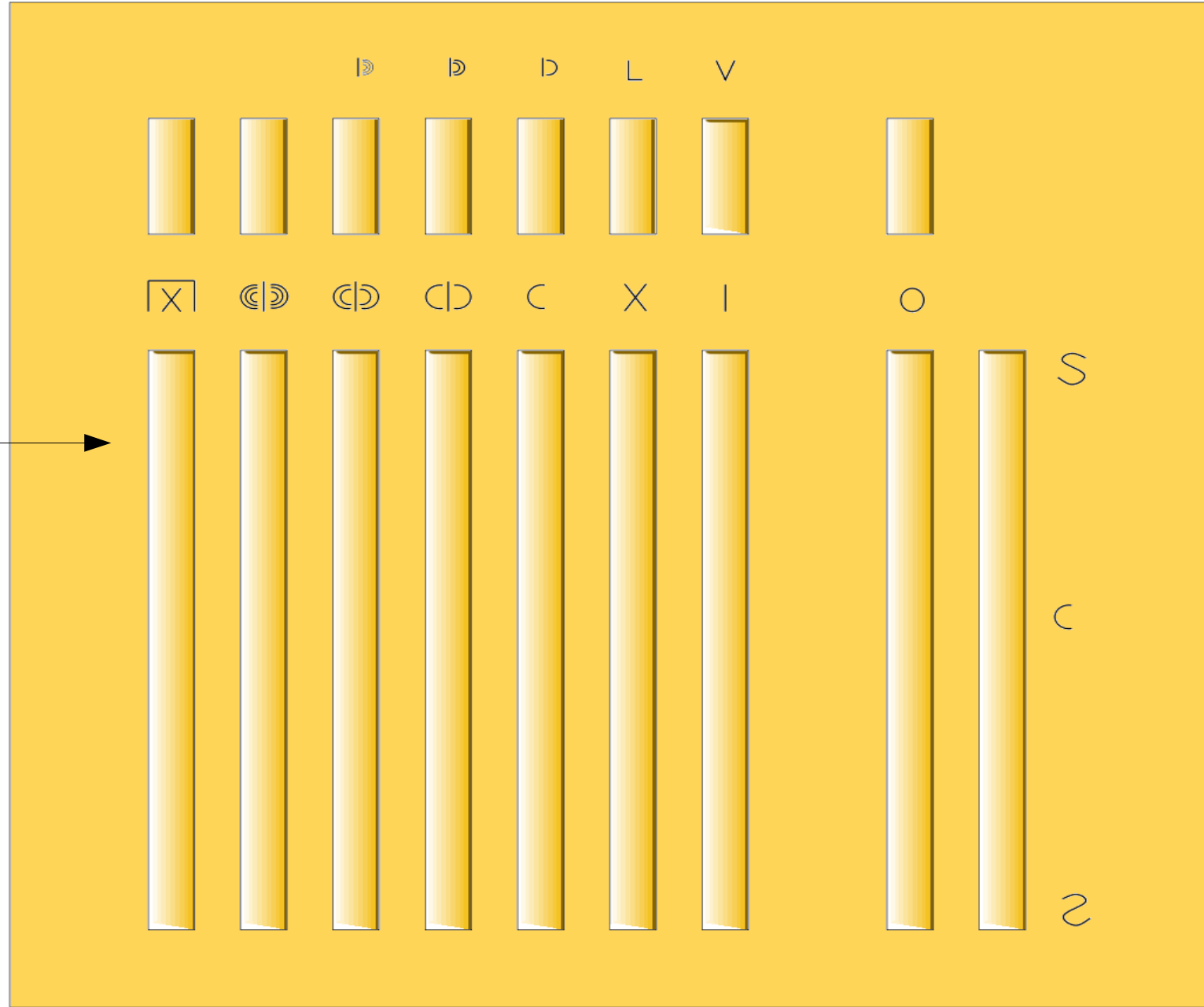


SUBTRACTIO

CCCXXXIII



CXXI

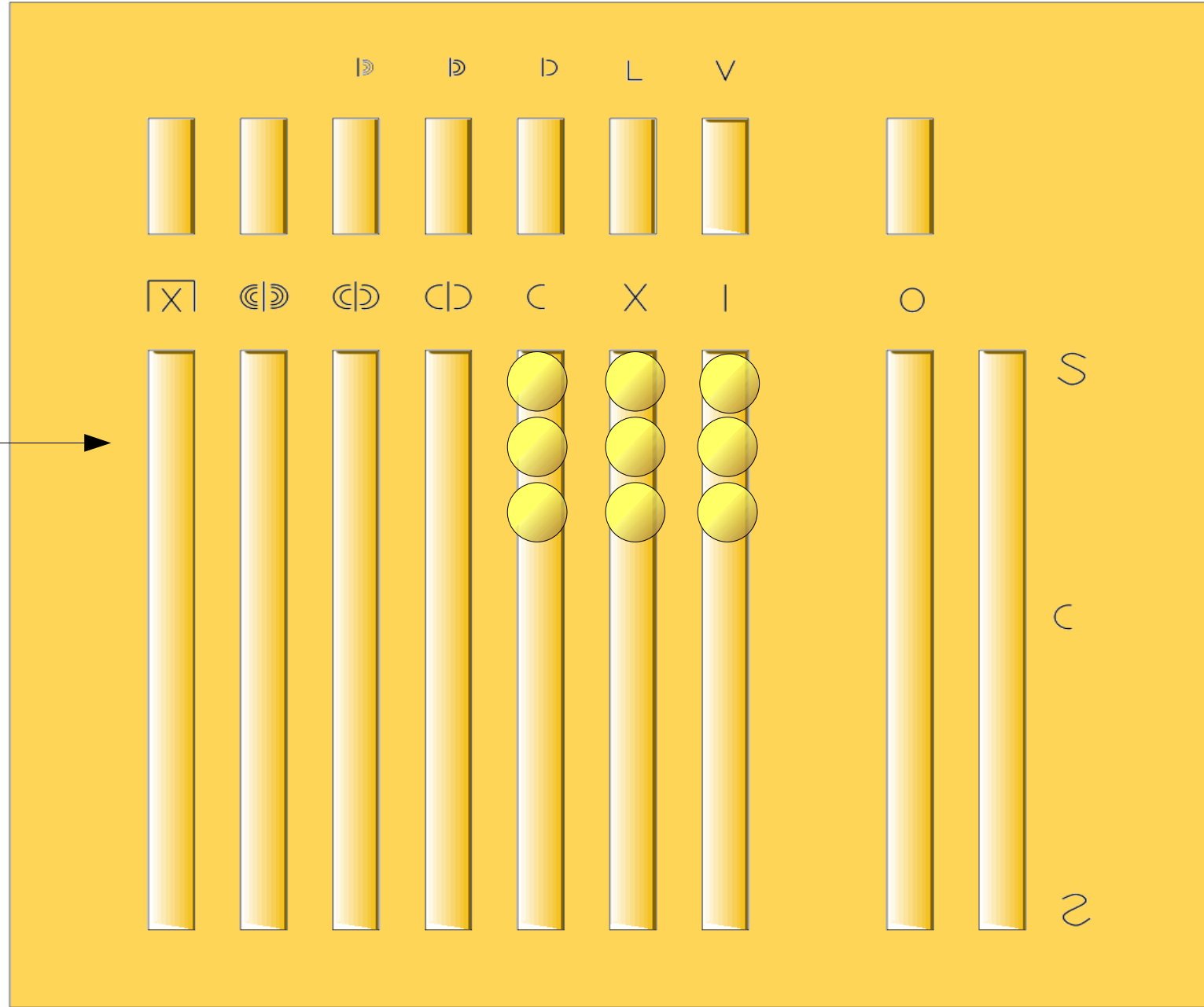


SUBTRACTIO

CCCXXXIII



CXXI

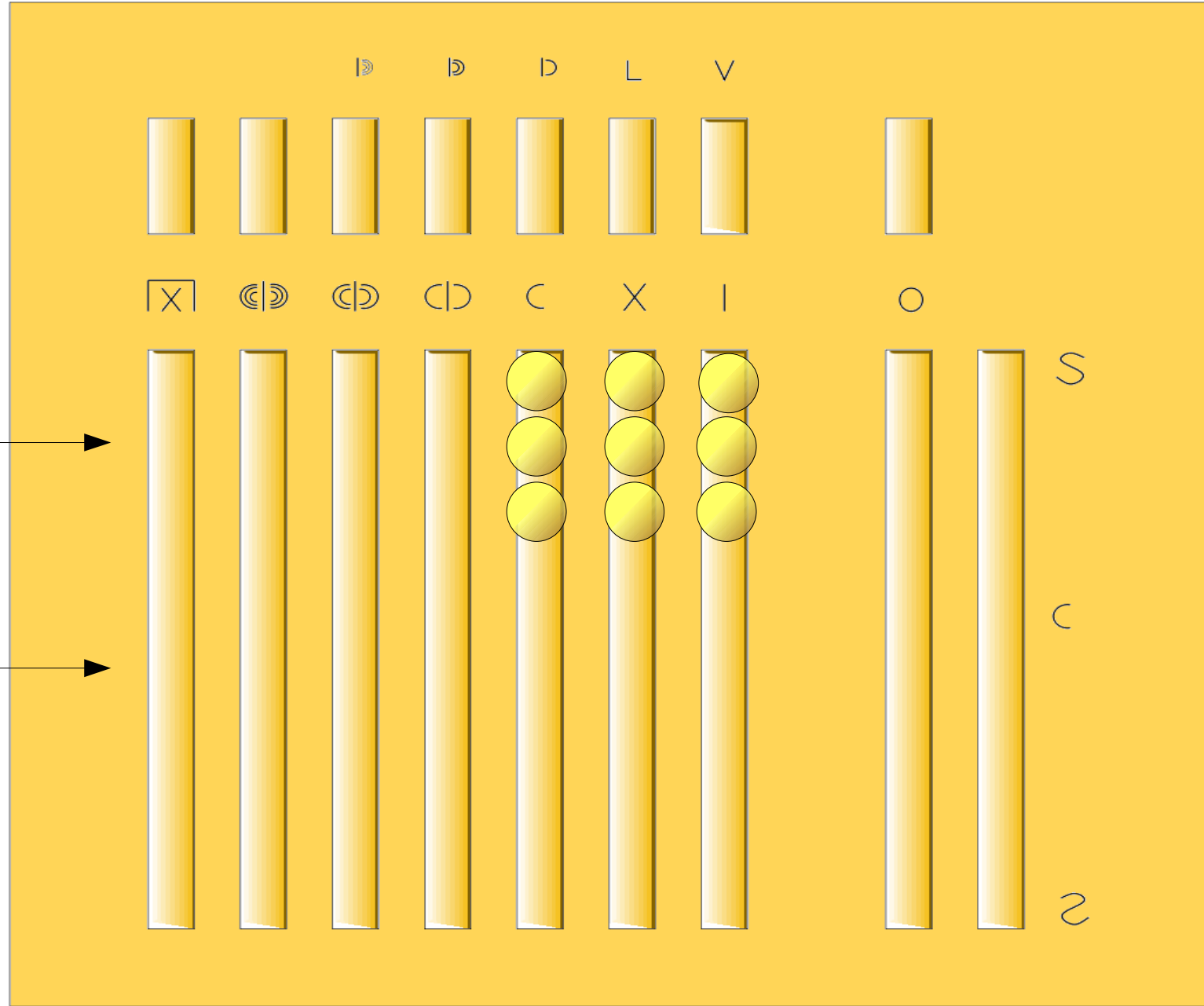


SUBTRACTIO

CCCXXXIII

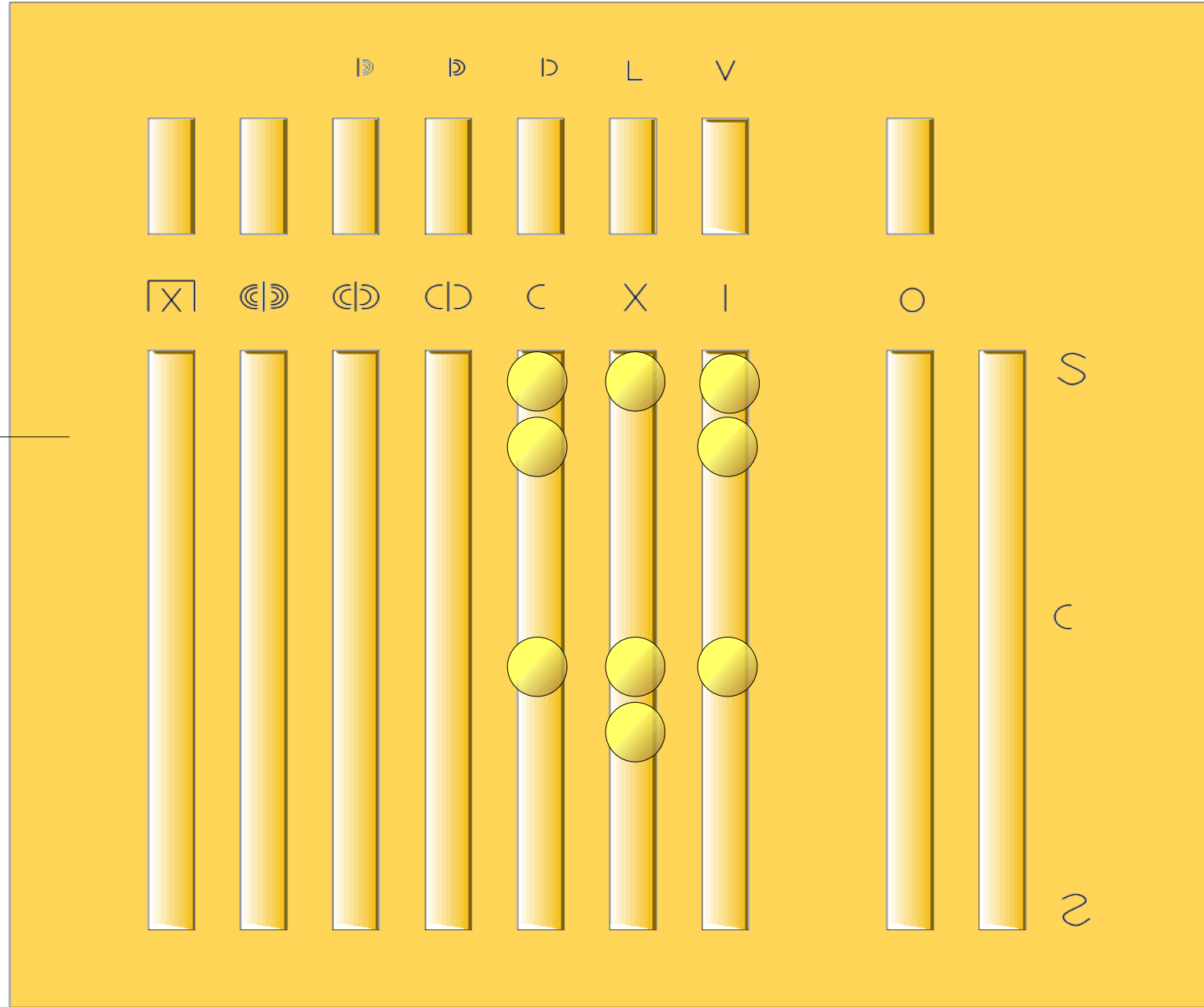


CXXI



SUBTRACTIO

CCXII

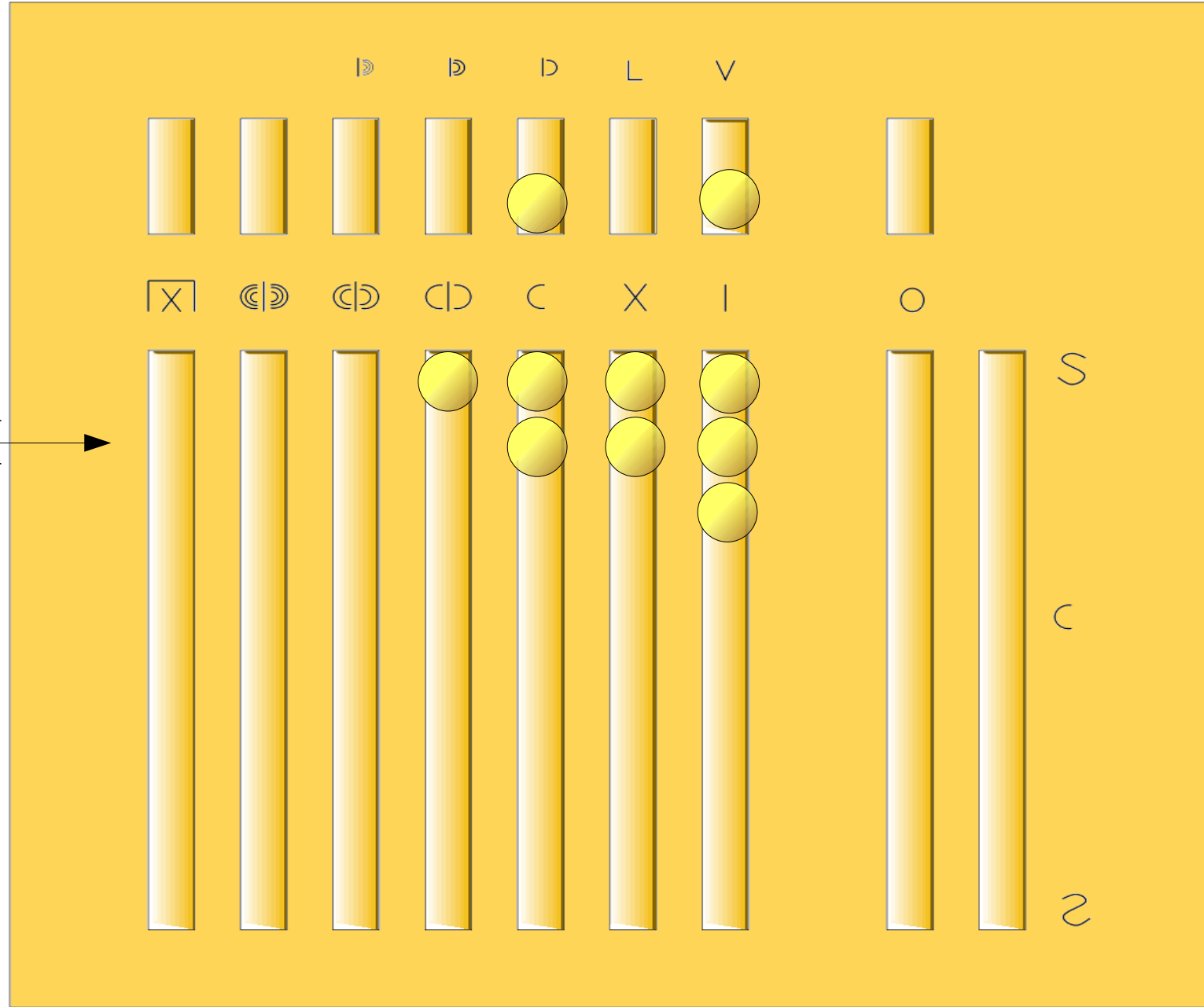


SUBTRACTIO

MDCCLXXVIII



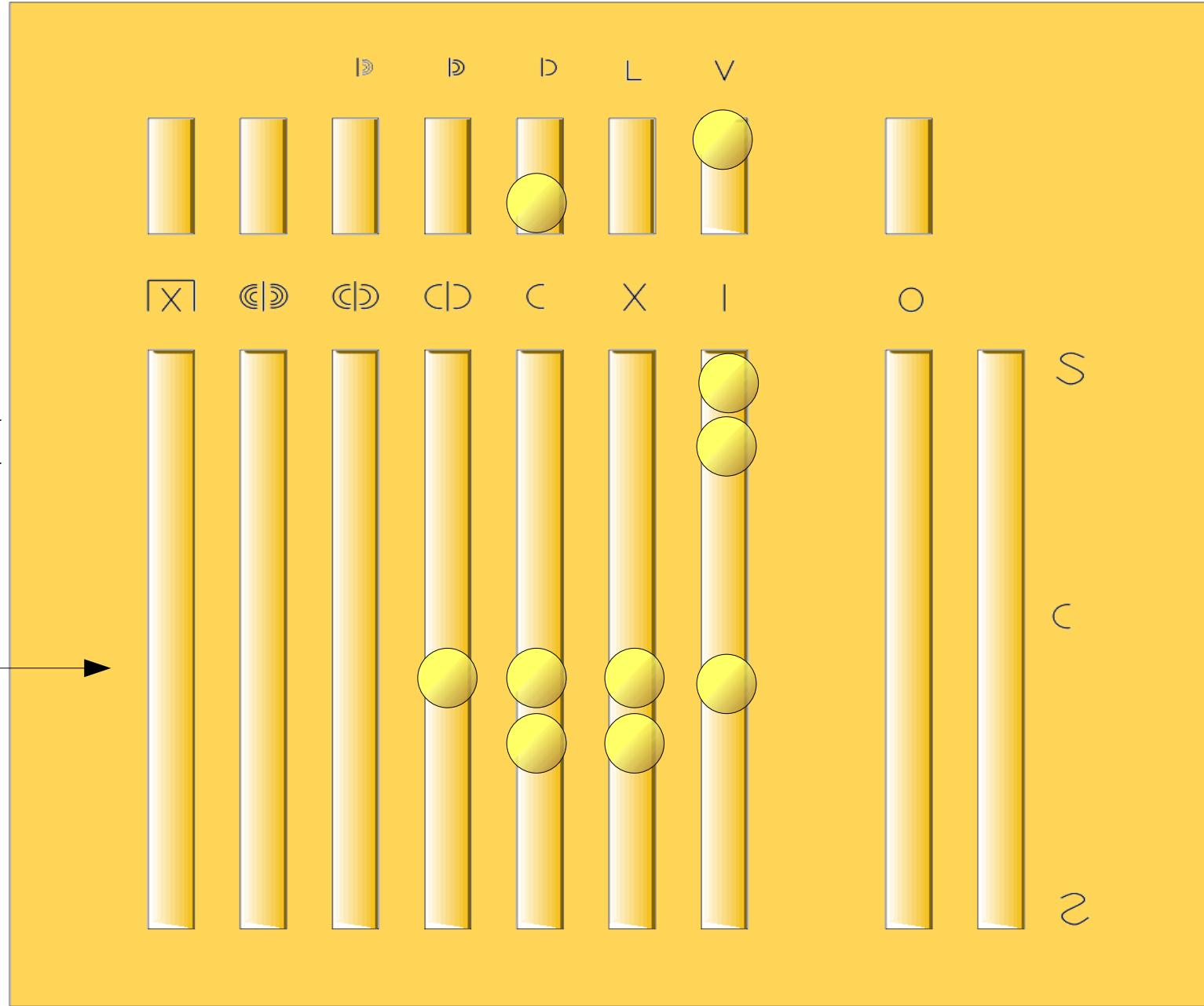
MCCXXVI



SUBTRACTIO

MDCCLXXVIII

MCCXXVI



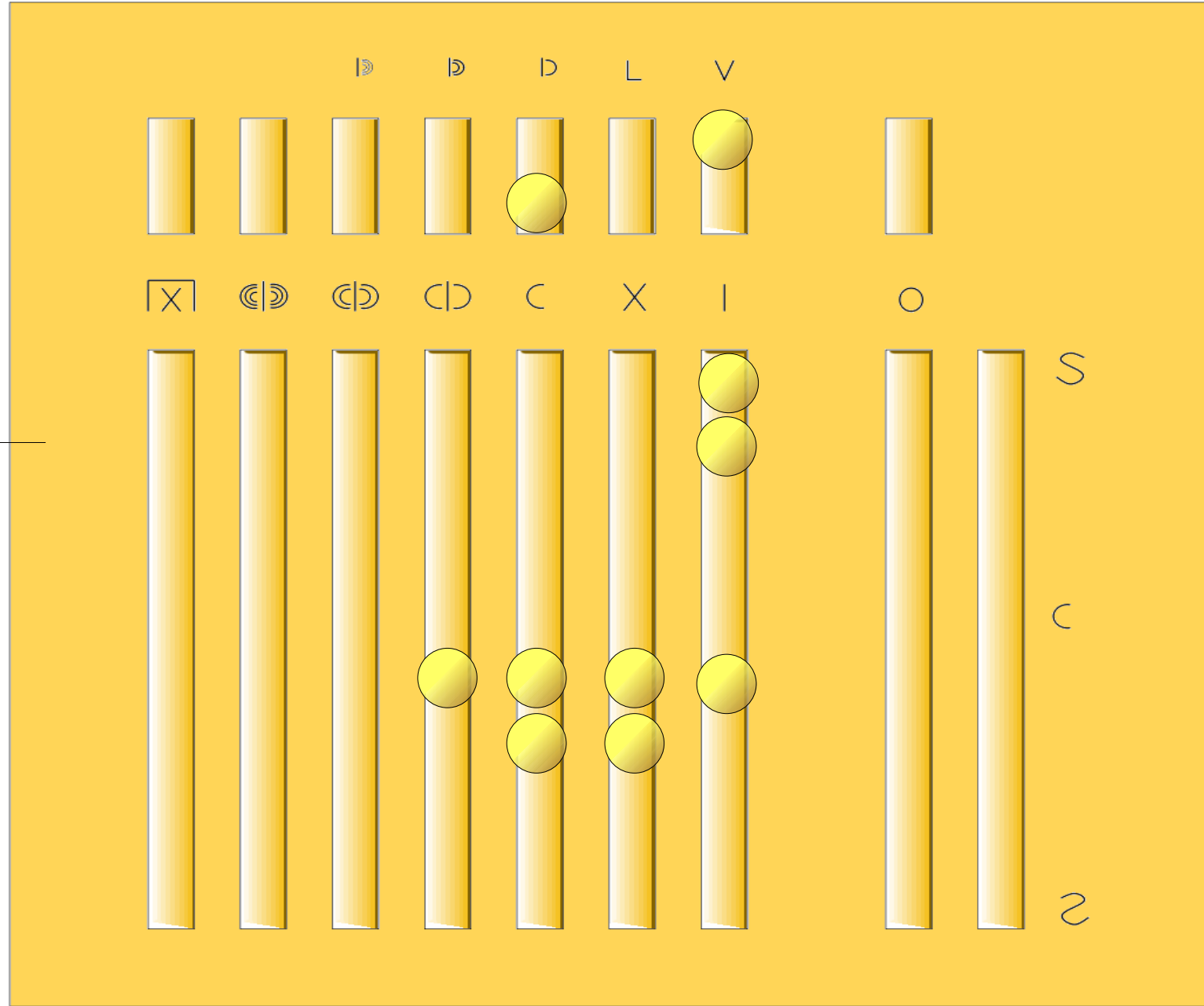
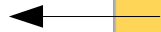
S

C

2

SUBTRACTIO

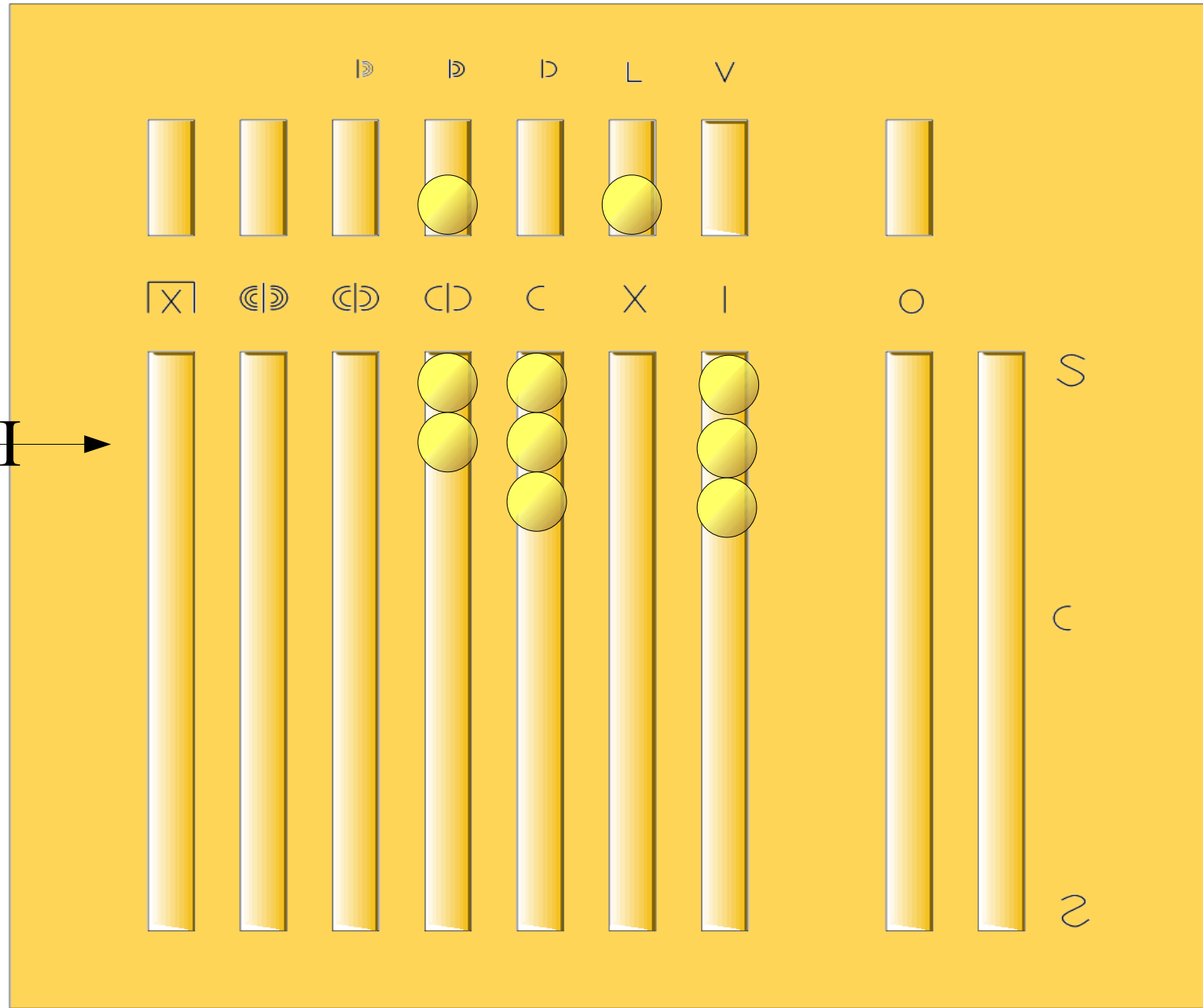
DII



SUBTRACTIO

DMMCCCLII →

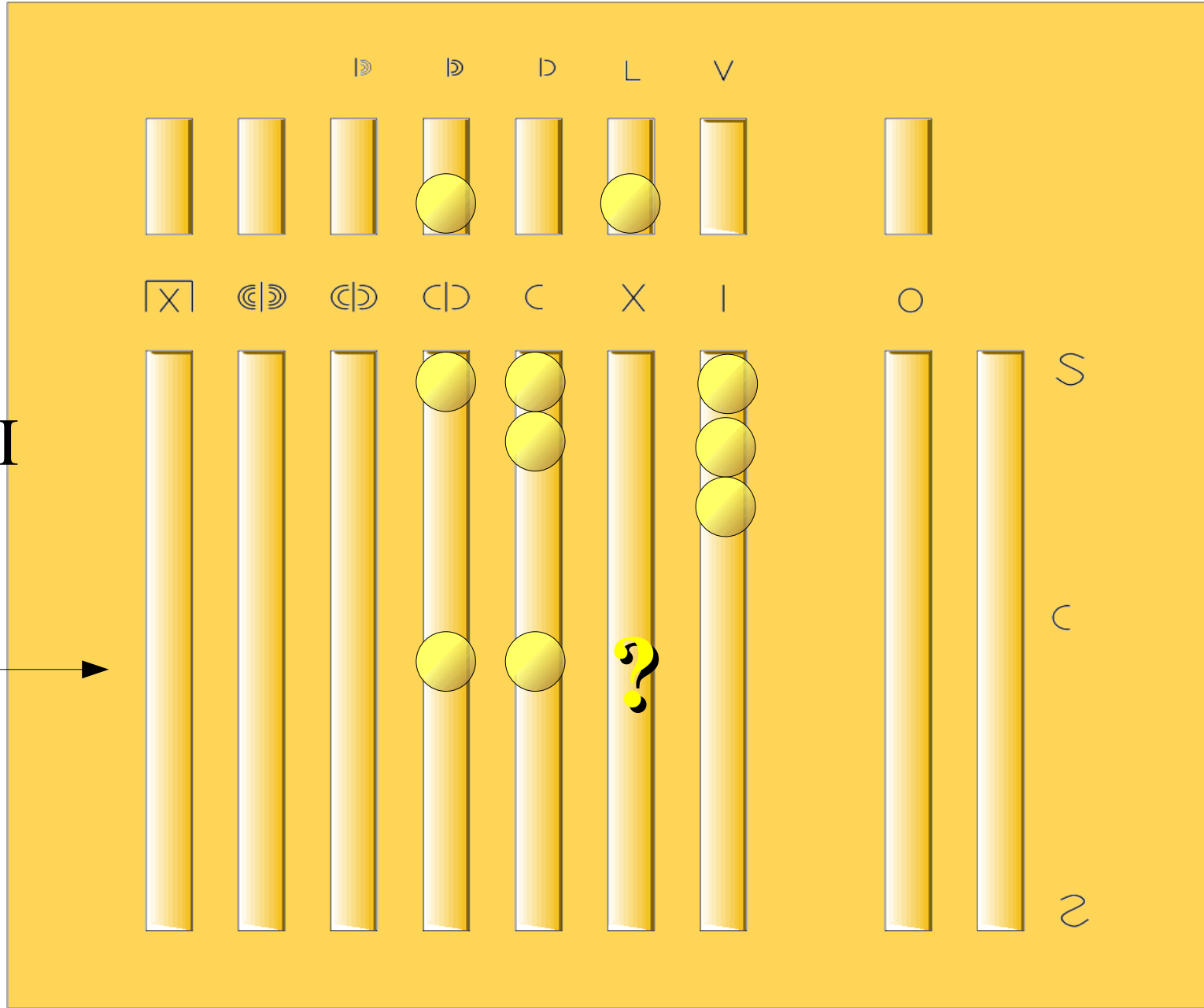
MCXX



SUBTRACTIO

DMCCLIII

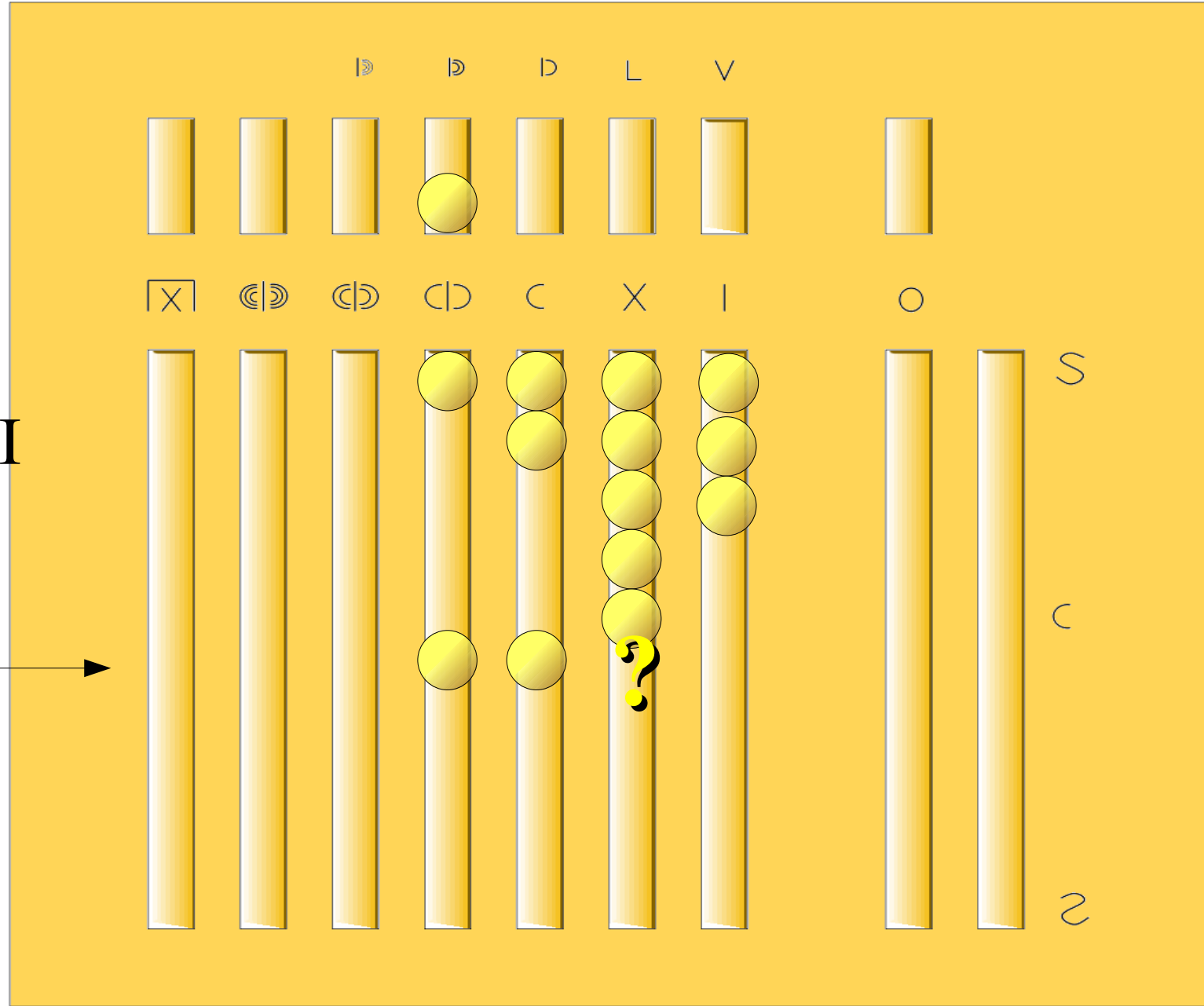
MCXX



SUBTRACTIO

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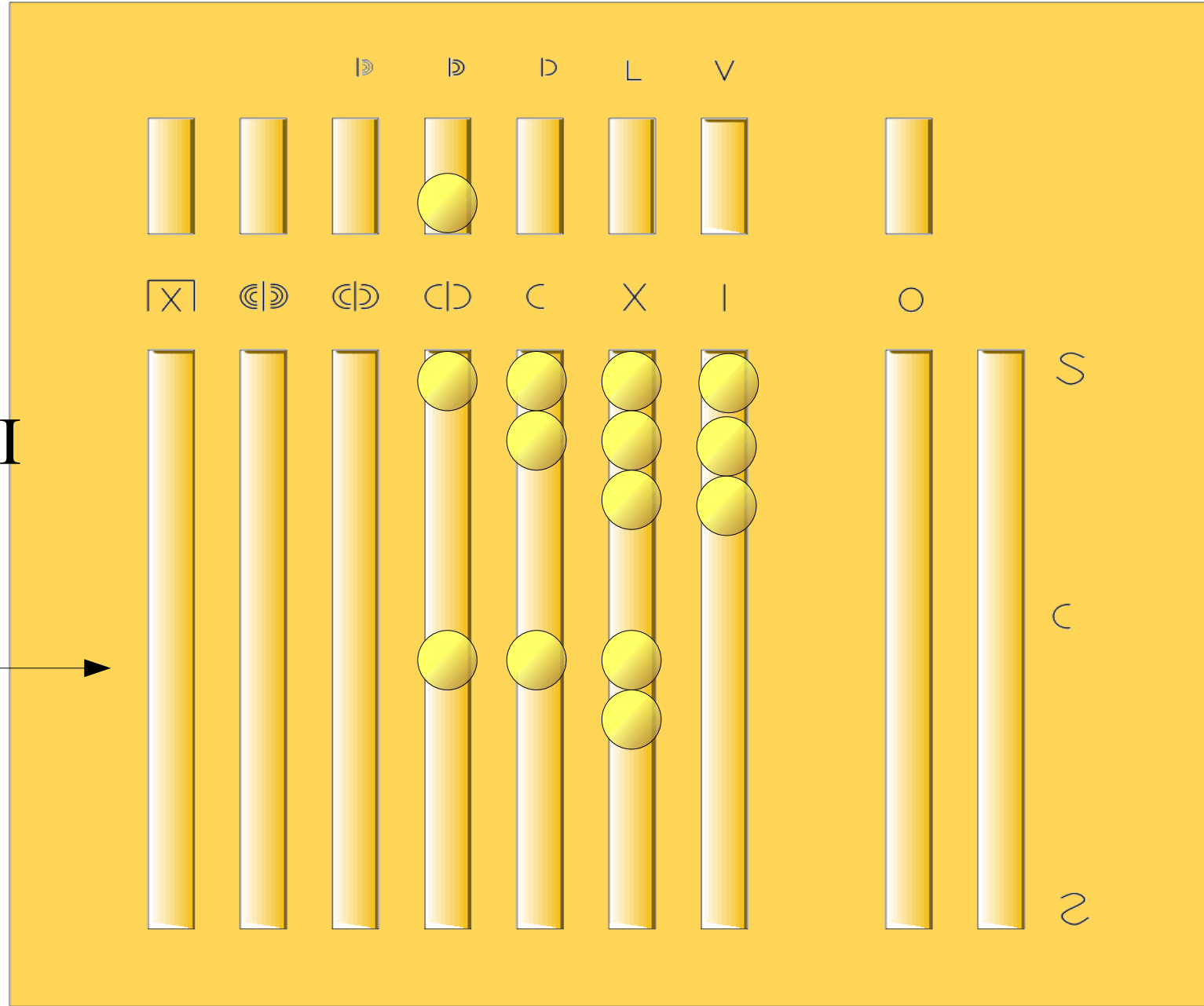
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SUBTRACTIO

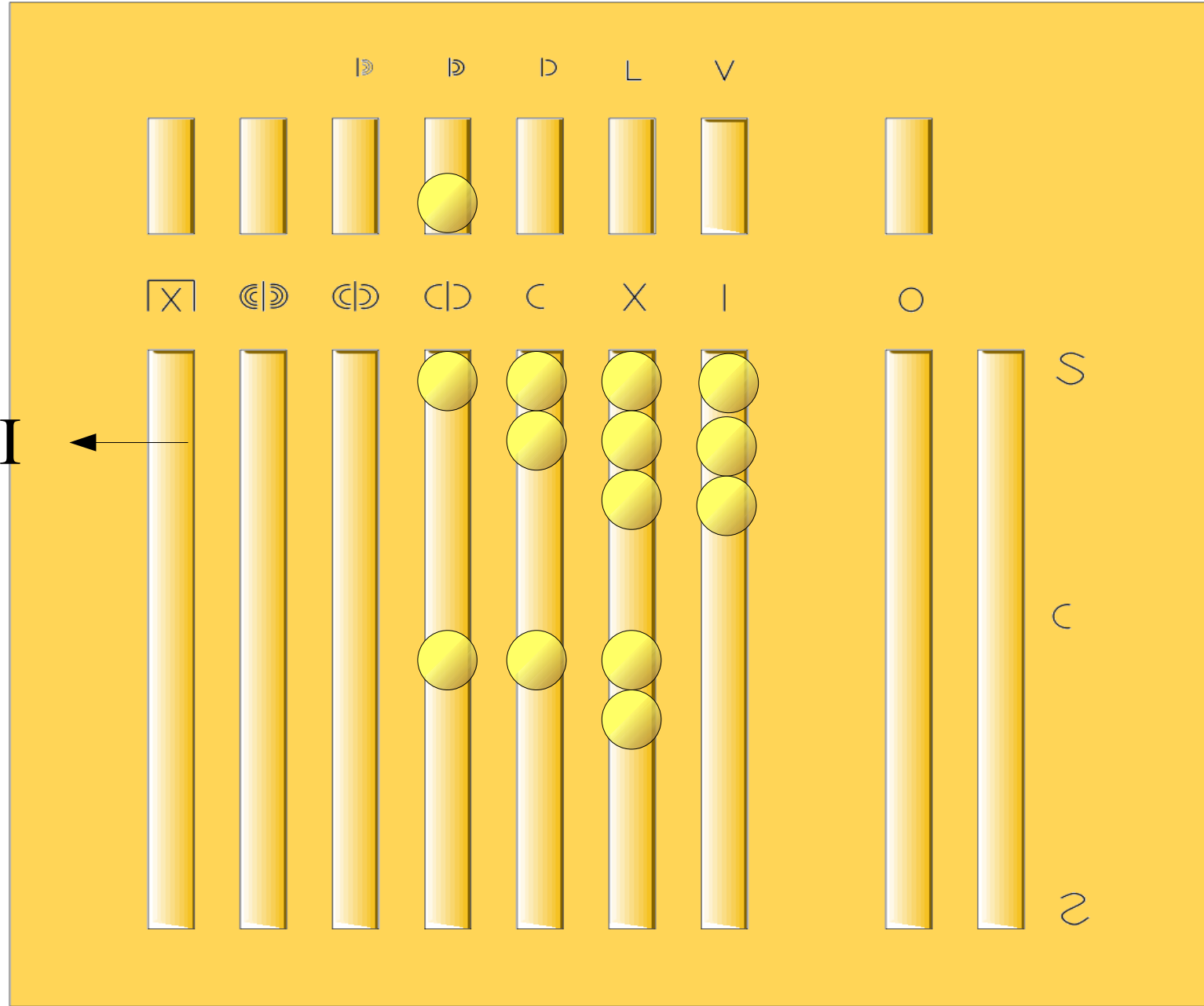
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MCXX



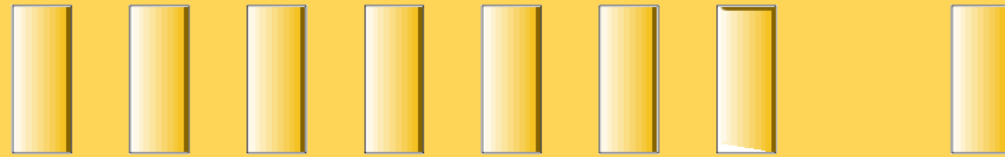
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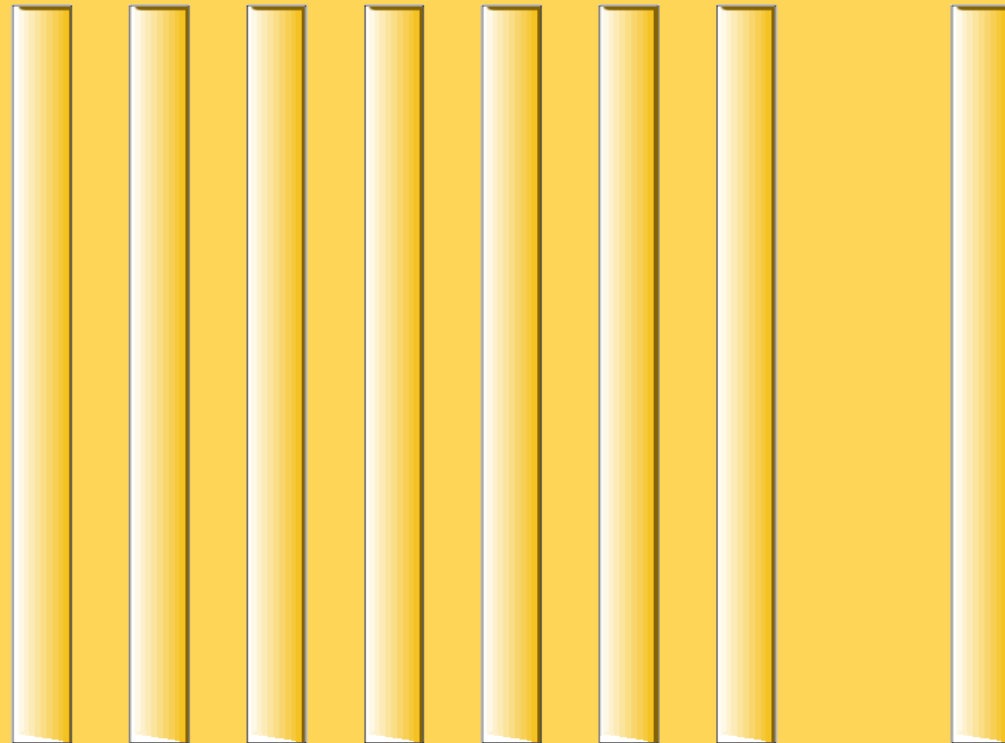


SUBTRACTIO

D D D L V



X CD CD CD C X I O



S

C

2

X MDCLXXV

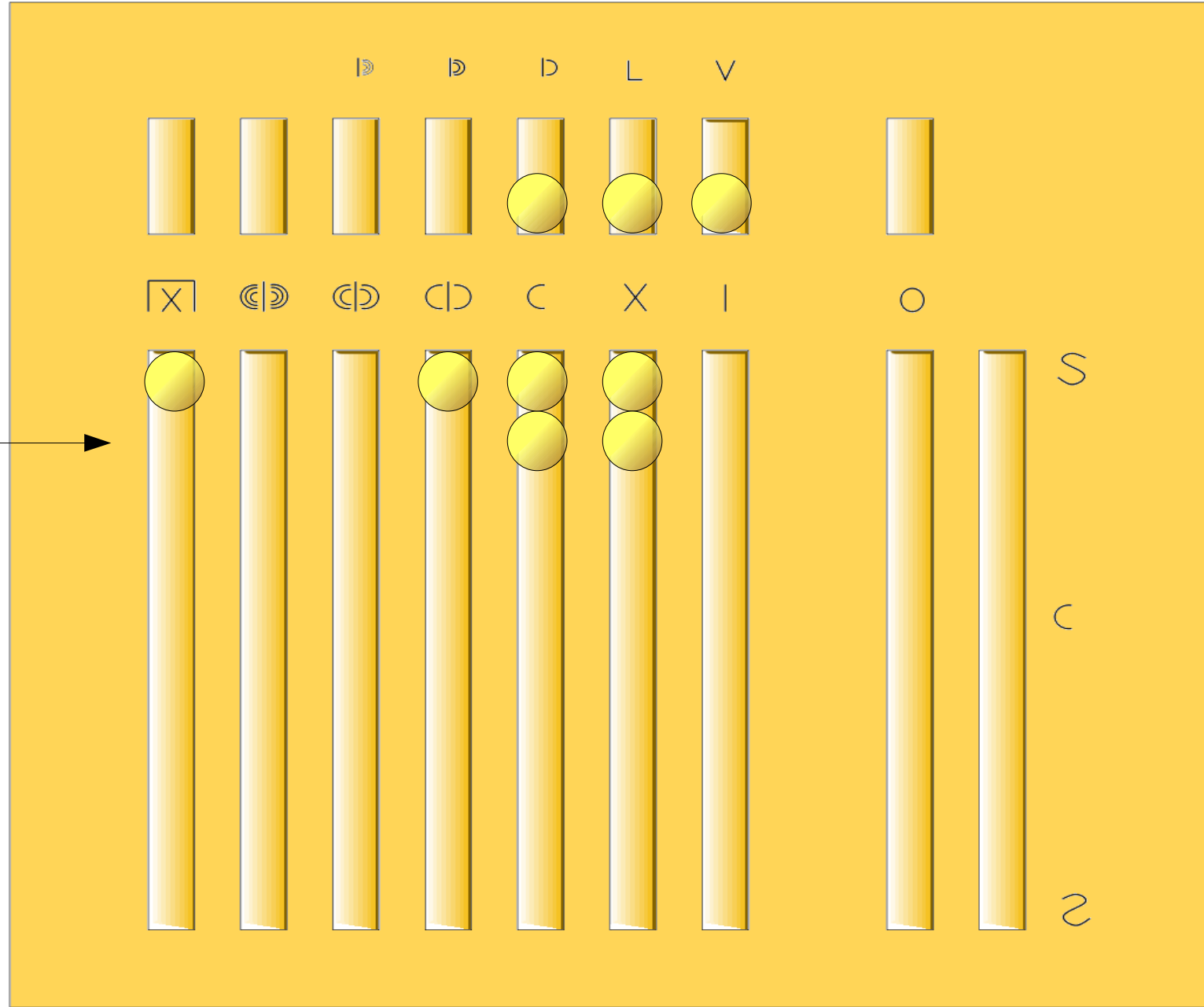
MCXXXII



SUBTRACTIO

X MDCLXXV →

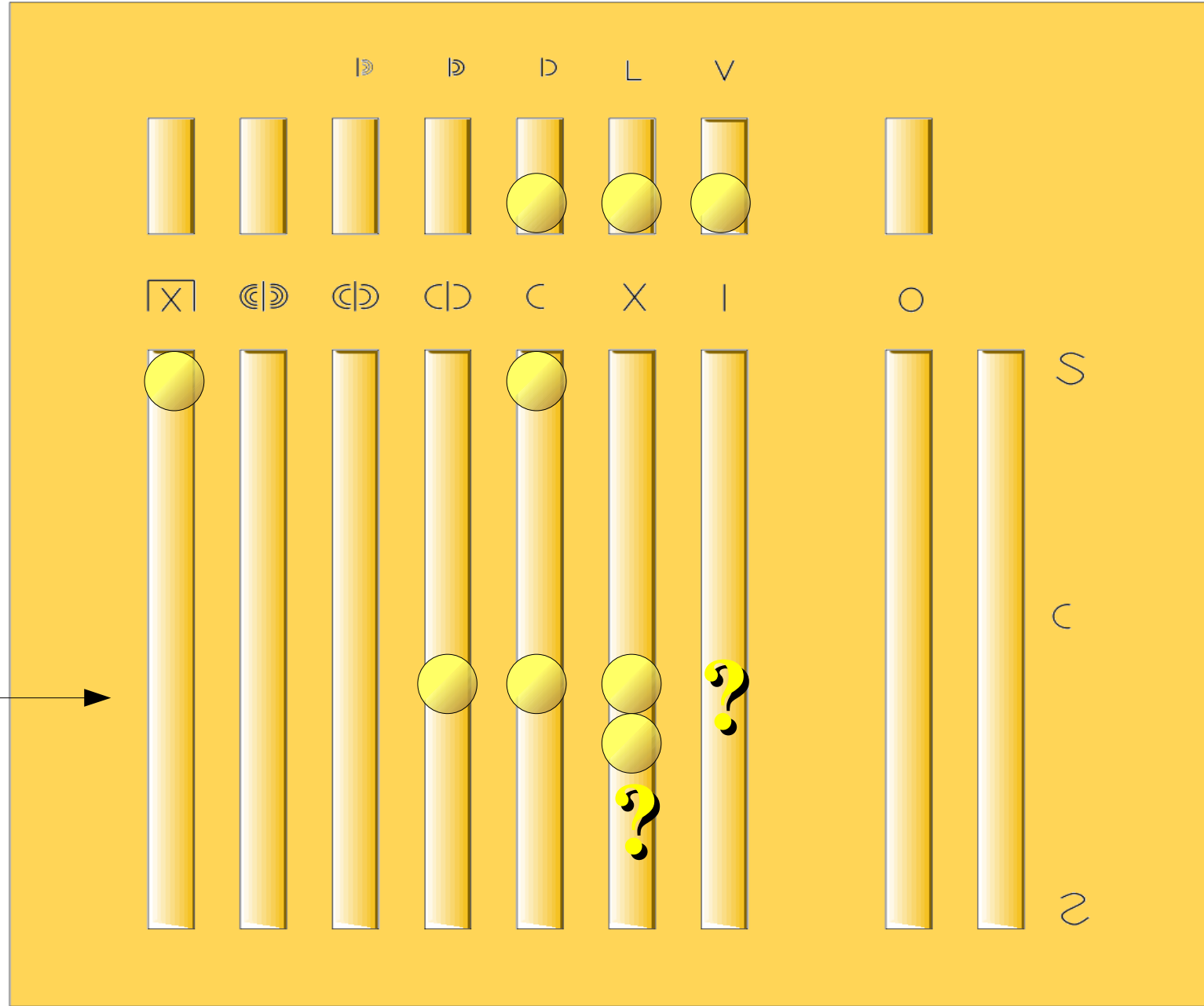
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SUBTRACTIO

X MDCLXXV

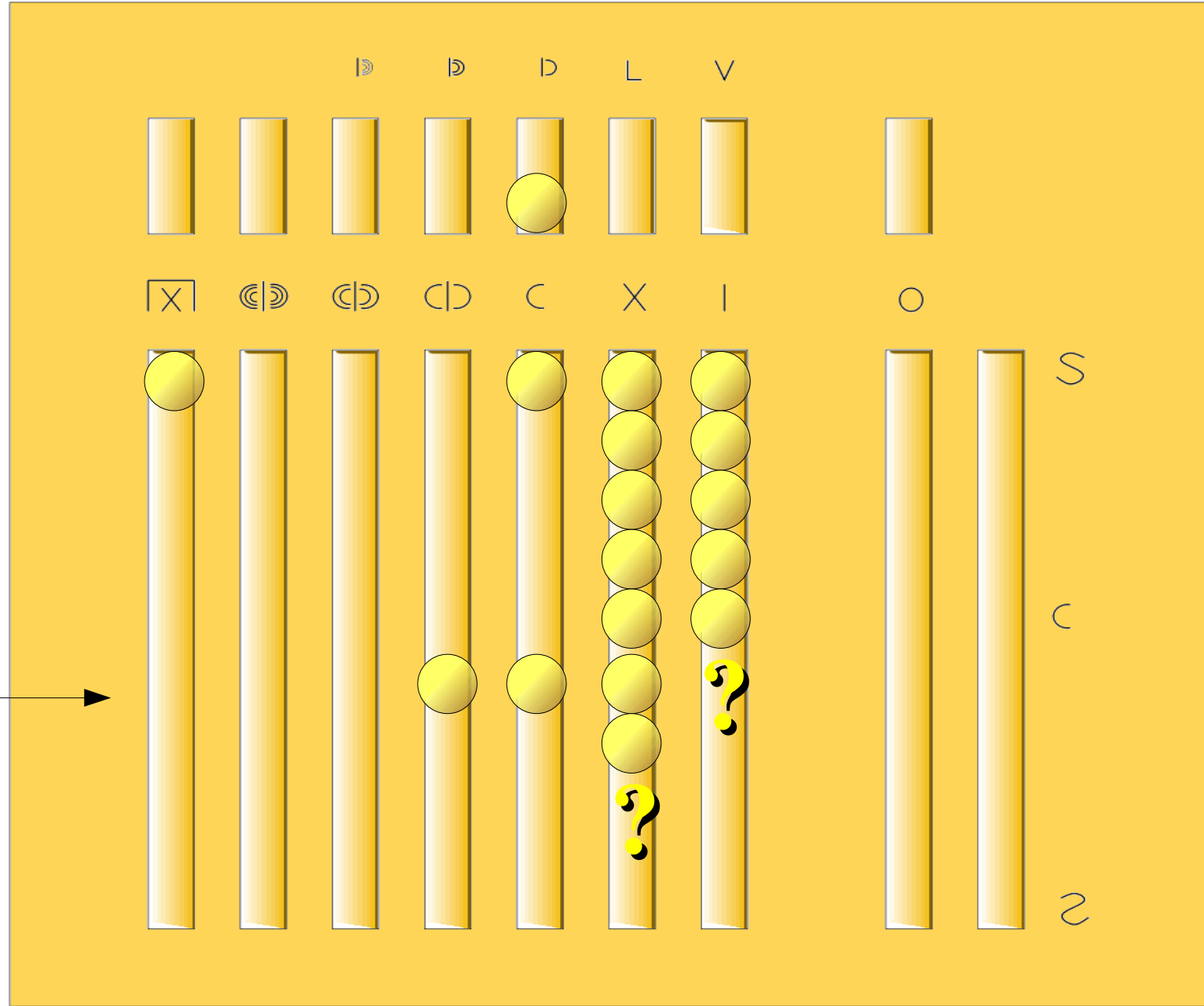
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SUBTRACTIO

X MDCLXXV

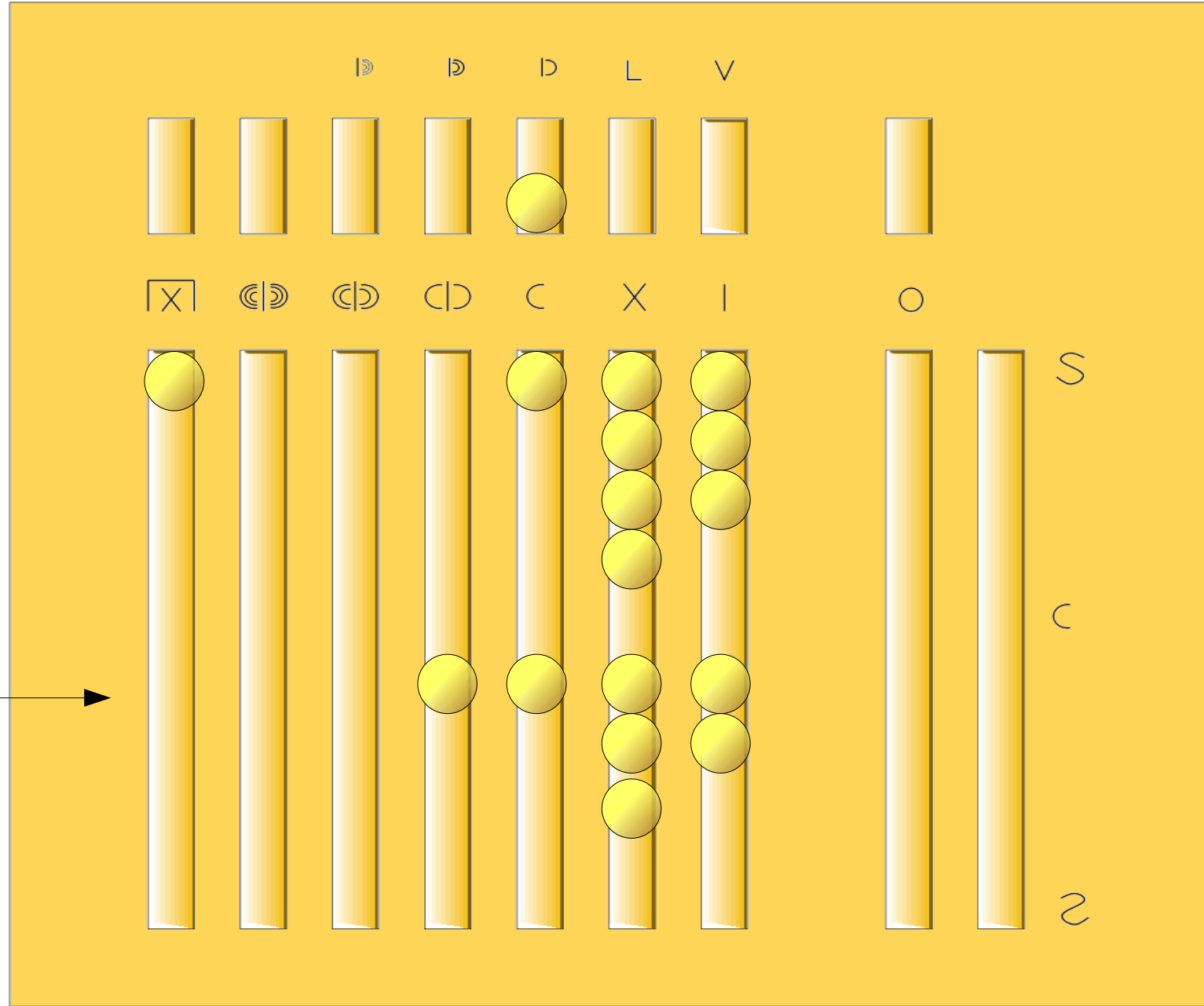
MCXXXII



SUBTRACTIO

X MDCLXXV

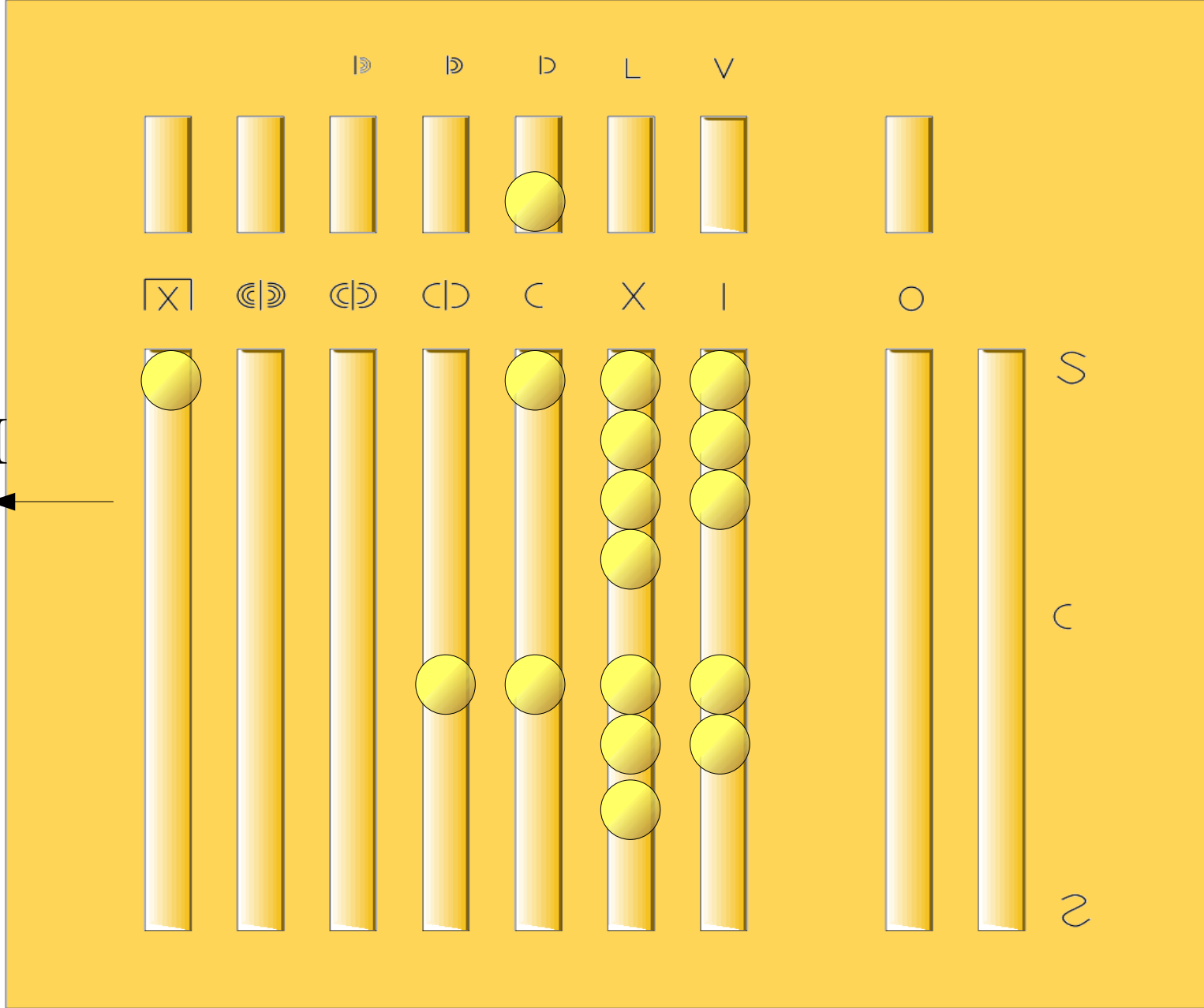
MCXXXII



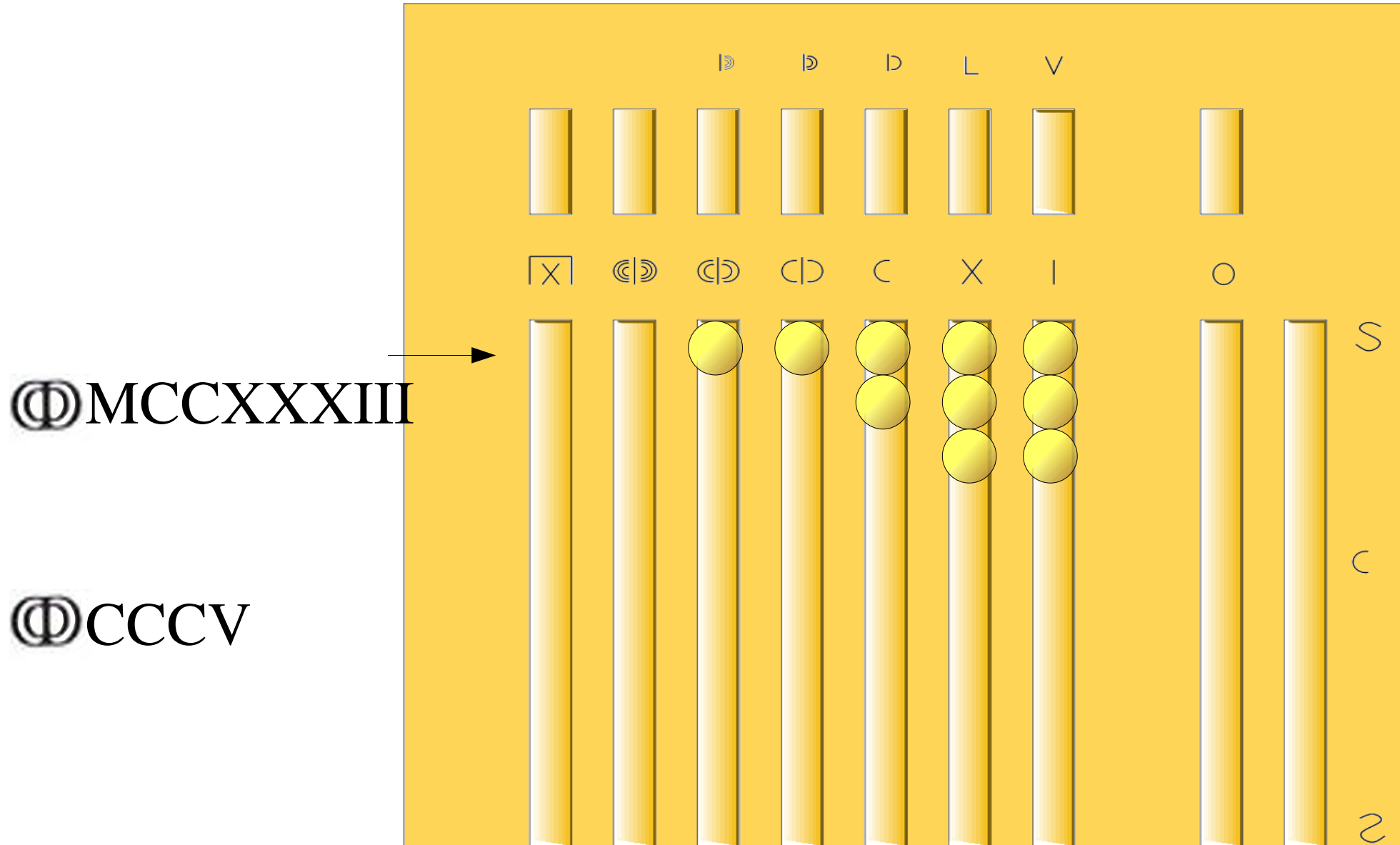
SUBTRACTIO

XDCXXXIII

XDCXLIII



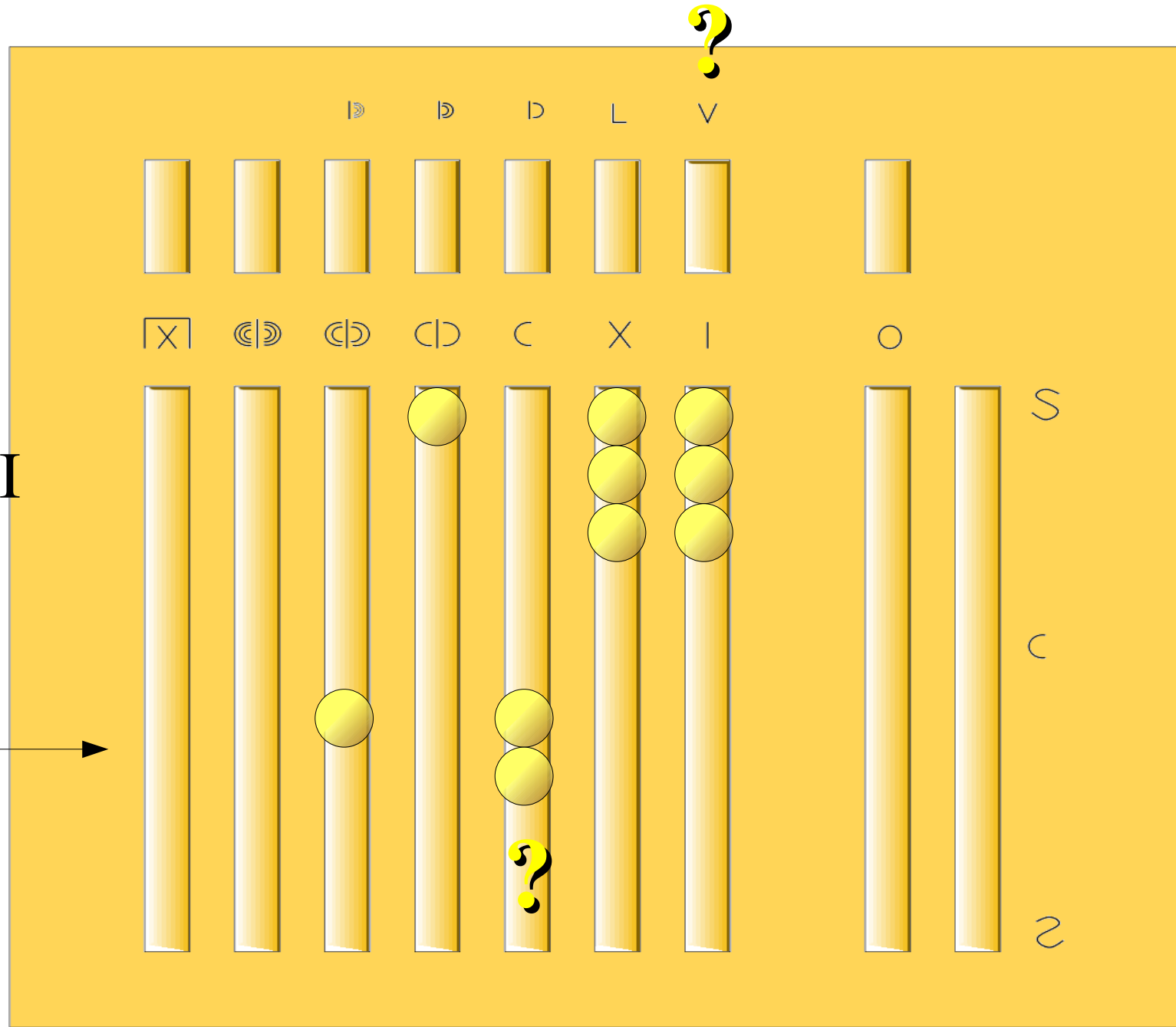
SUBTRACTIO



SUBTRACTIO

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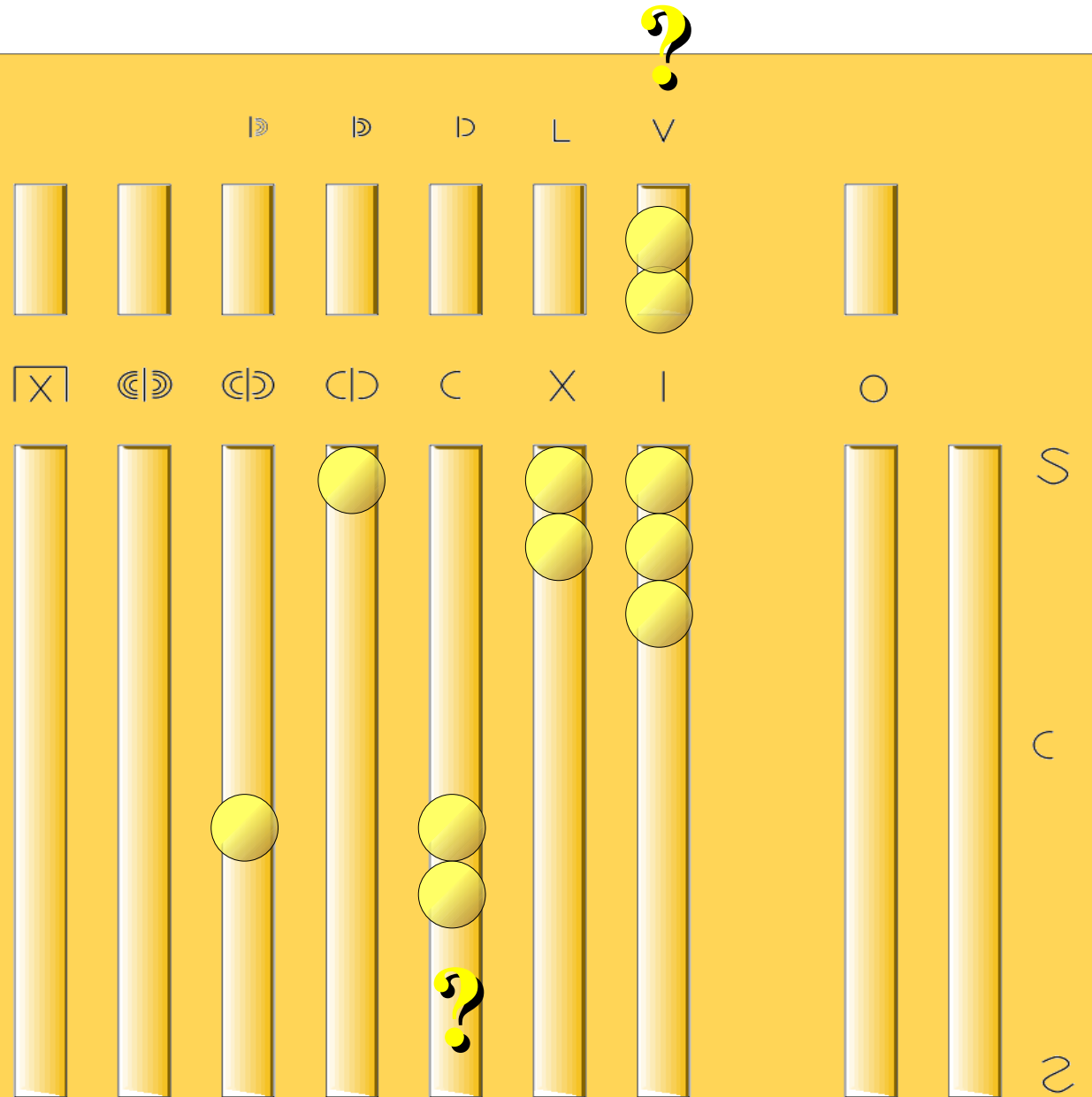
Ⓞ CCCV



SUBTRACTIO

Ⓞ MCCXXIII

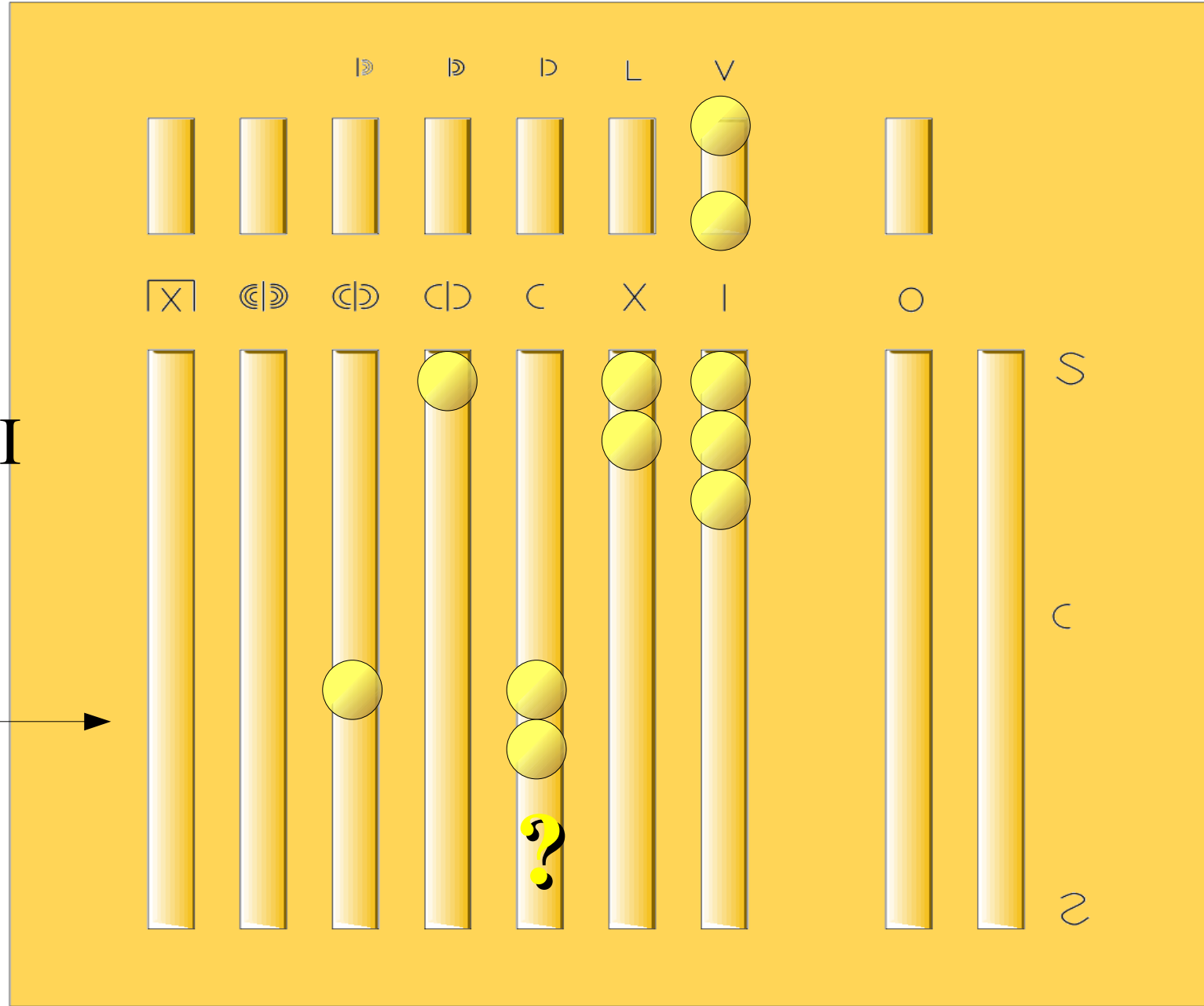
Ⓞ CCCV



SUBTRACTIO

Ⓞ MCCXXIII

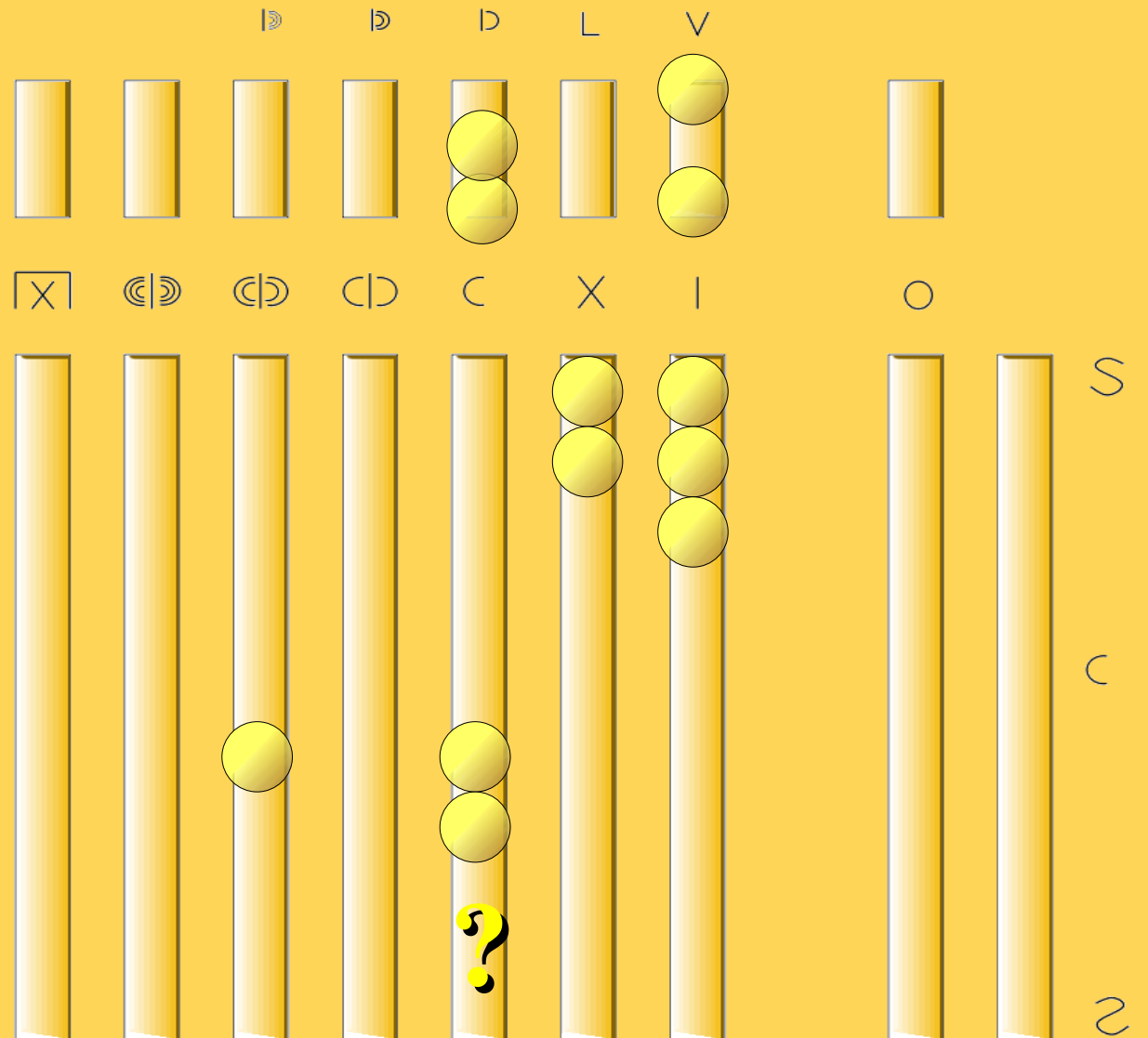
Ⓞ CCCV



SUBTRACTIO

Ⓞ MCCXXIII

Ⓞ CCCV



S

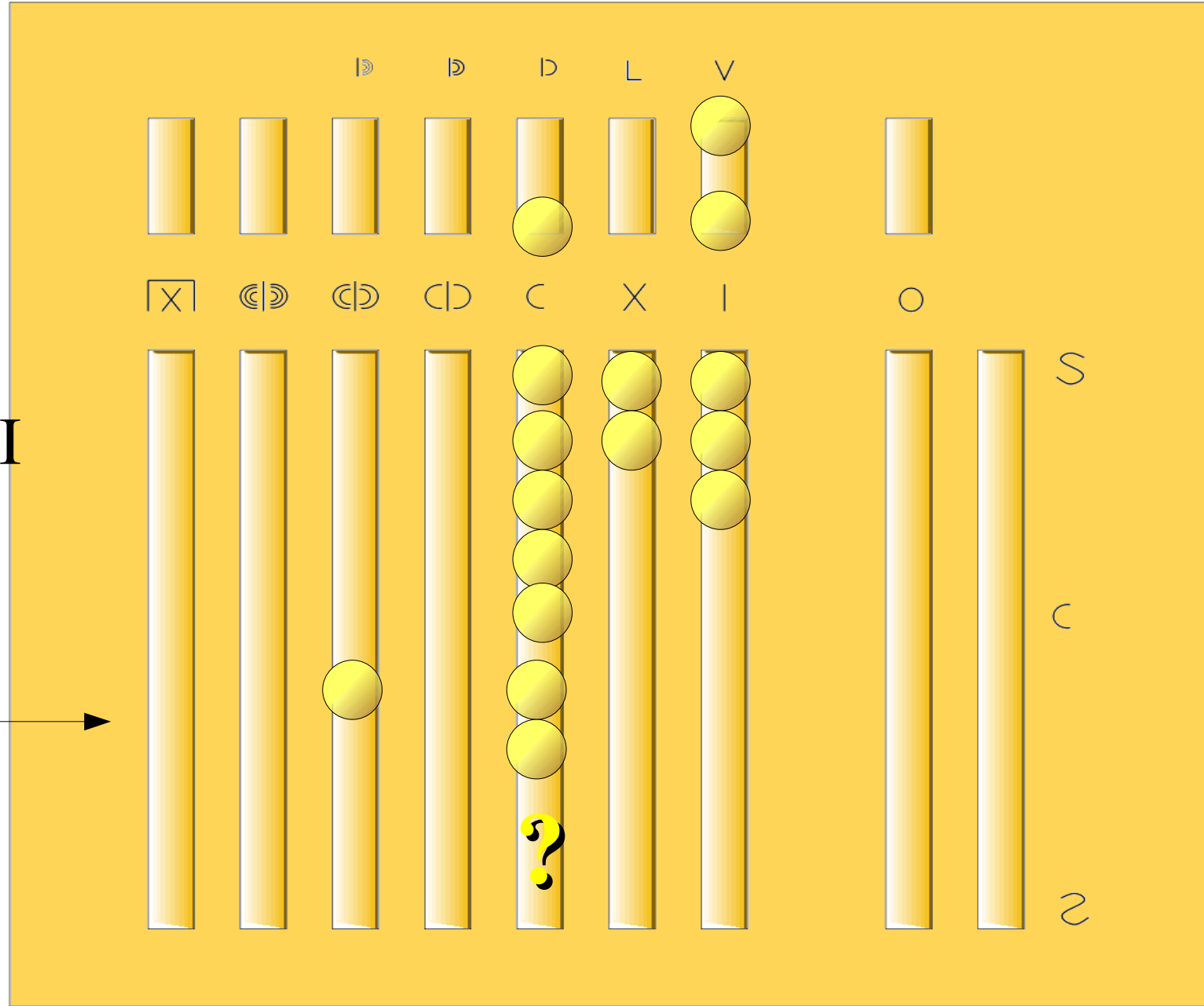
C

2

SUBTRACTIO

Ⓞ MCCXXIII

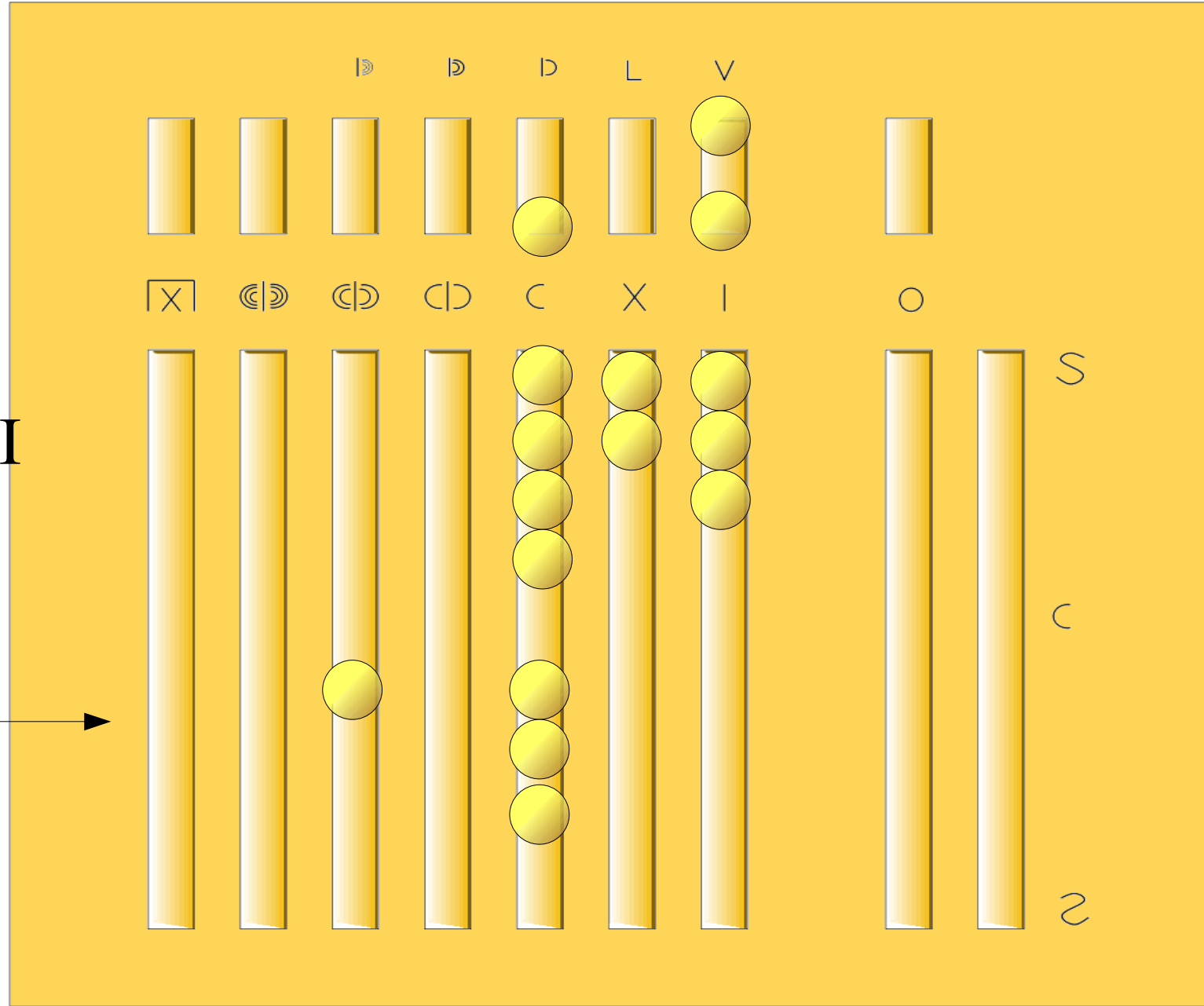
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SUBTRACTIO

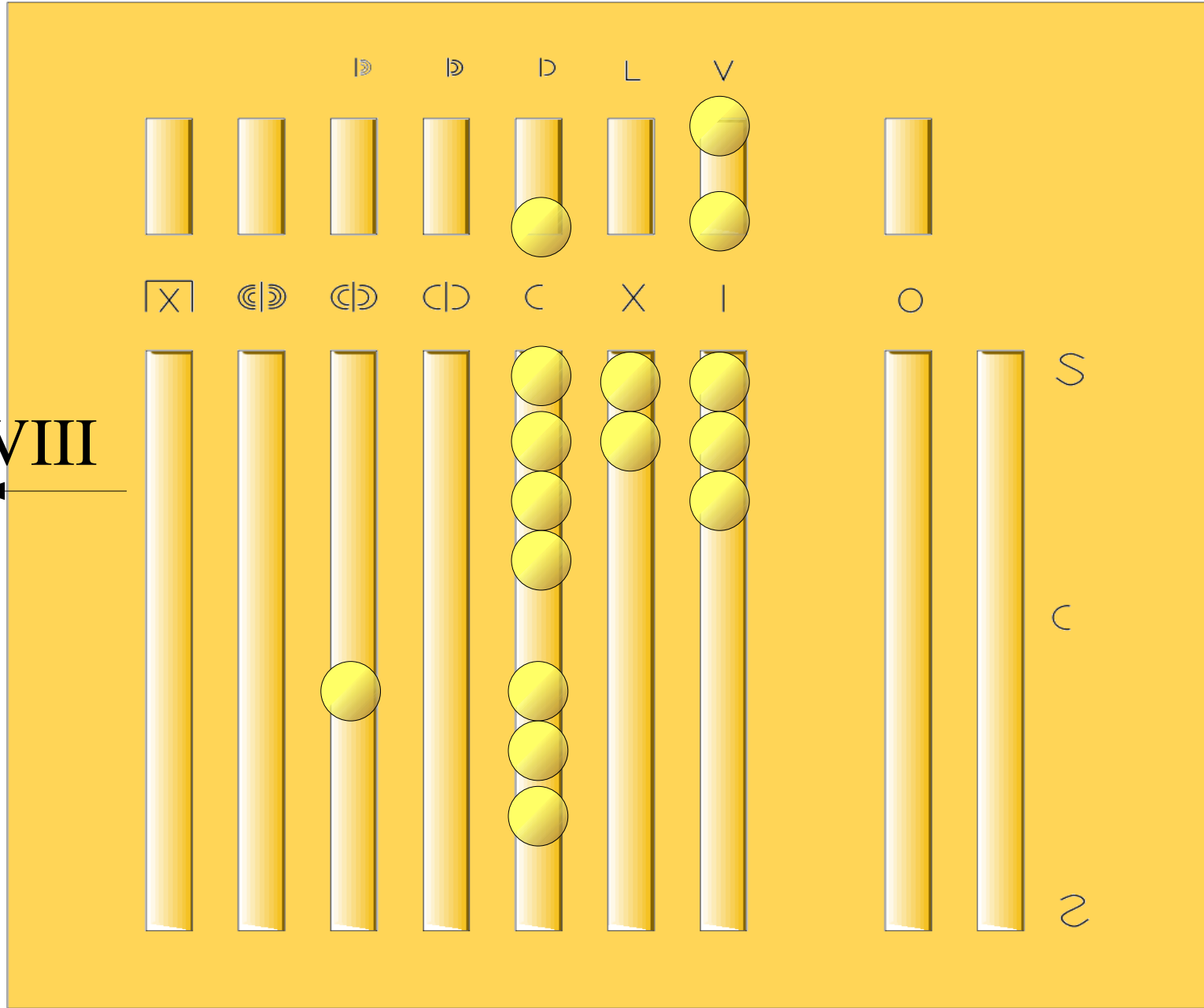
Ⓞ MCCXXIII

Ⓞ CCCV



SUBTRACTIO

ⓄDCCCCXXVIII



MULTIPLICATIO

MCXXI

III

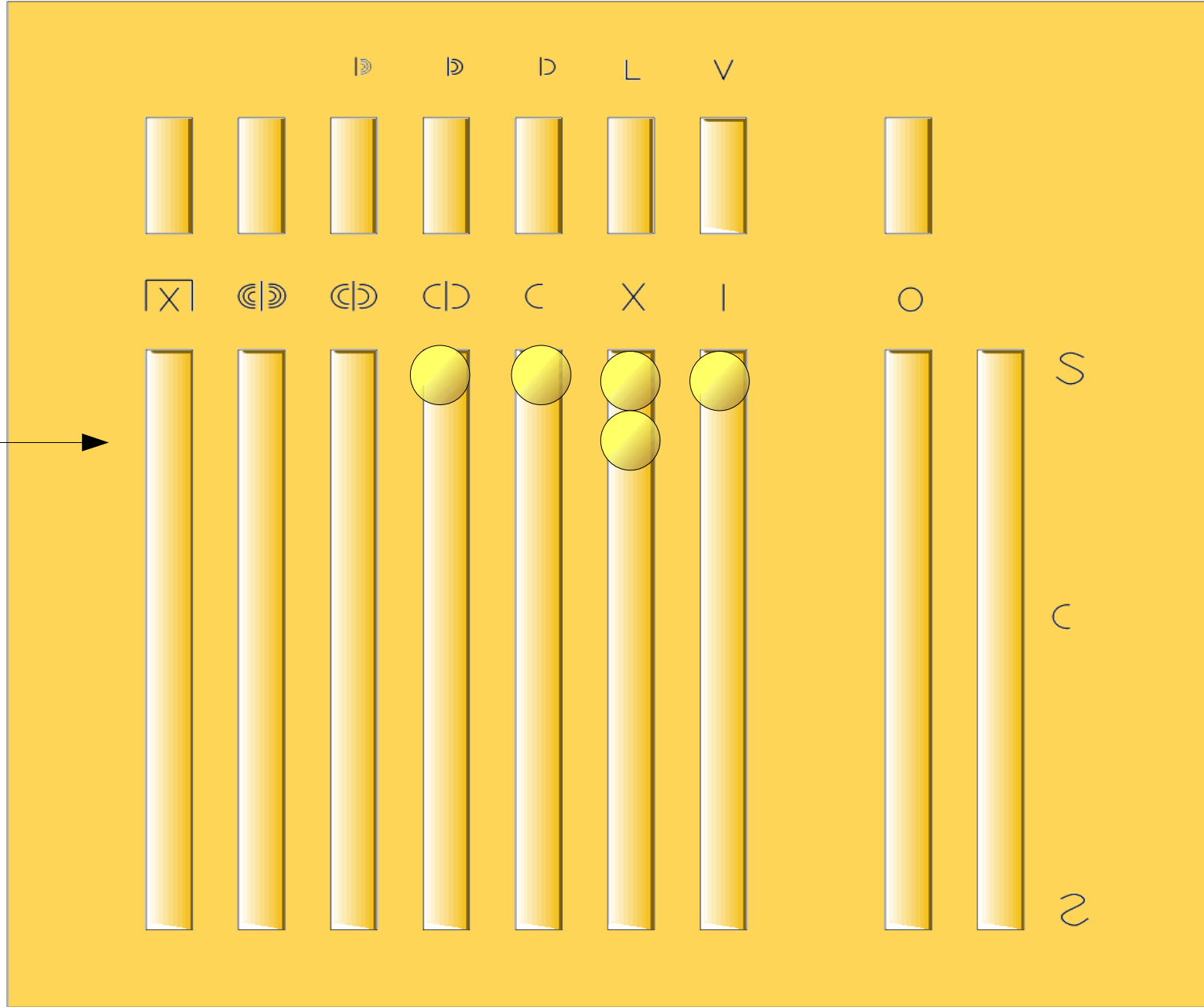


Abacus representation of the number 1234567890. The top row shows the Roman numerals: I, D, D, D, L, V. The middle row shows the symbols: X, C, C, C, C, X, I, O. The bottom row shows the numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, 0. The numbers 1-9 are represented by vertical bars of varying heights, and 0 is represented by a circle.

		I	D	D	D	L	V				
		X	C	C	C	C	X	I	O		
		1	2	3	4	5	6	7	8	9	0

MULTIPLICATIO

MCXXI



III

S

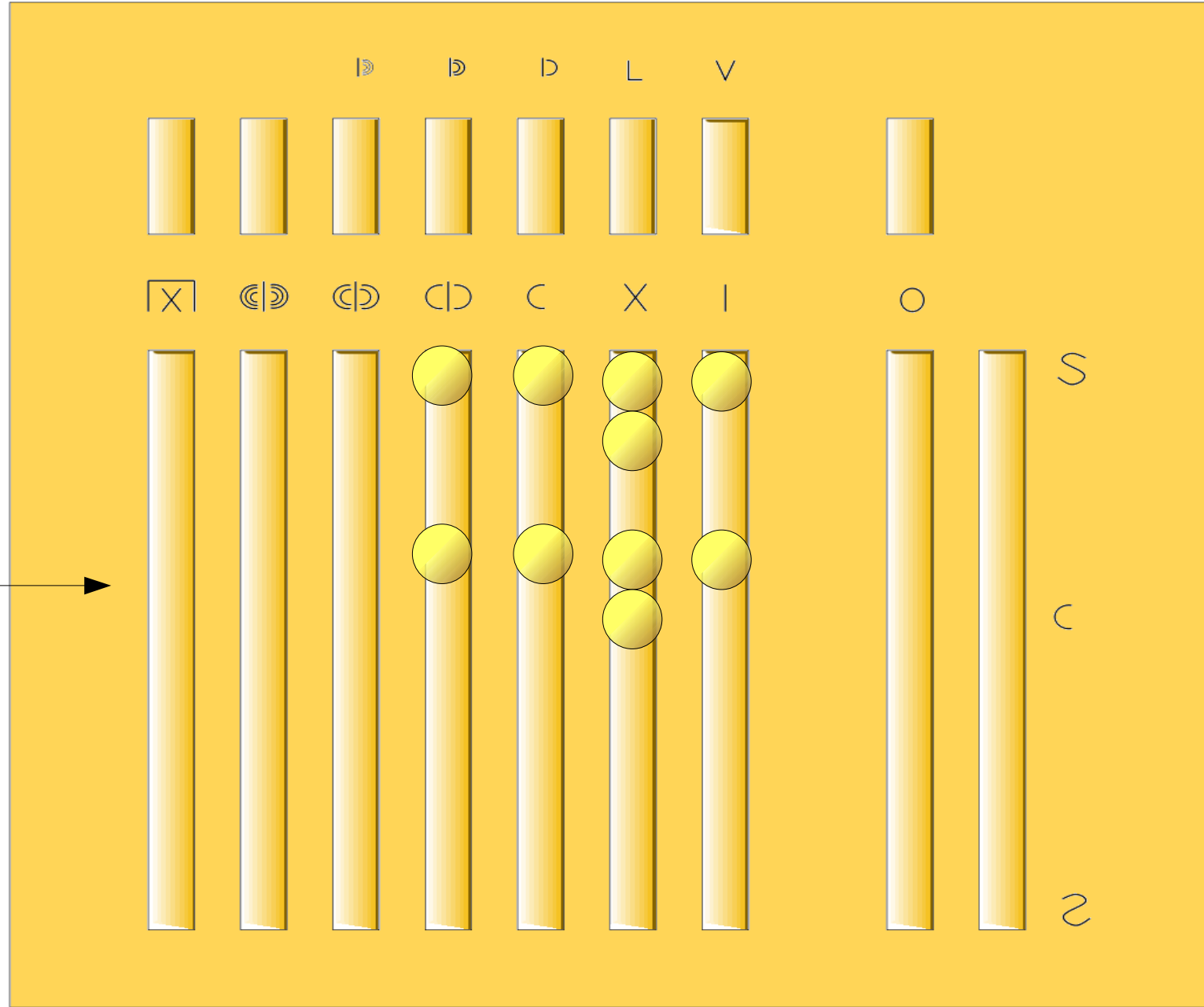
C

2

MULTIPLICATIO

MCXXI

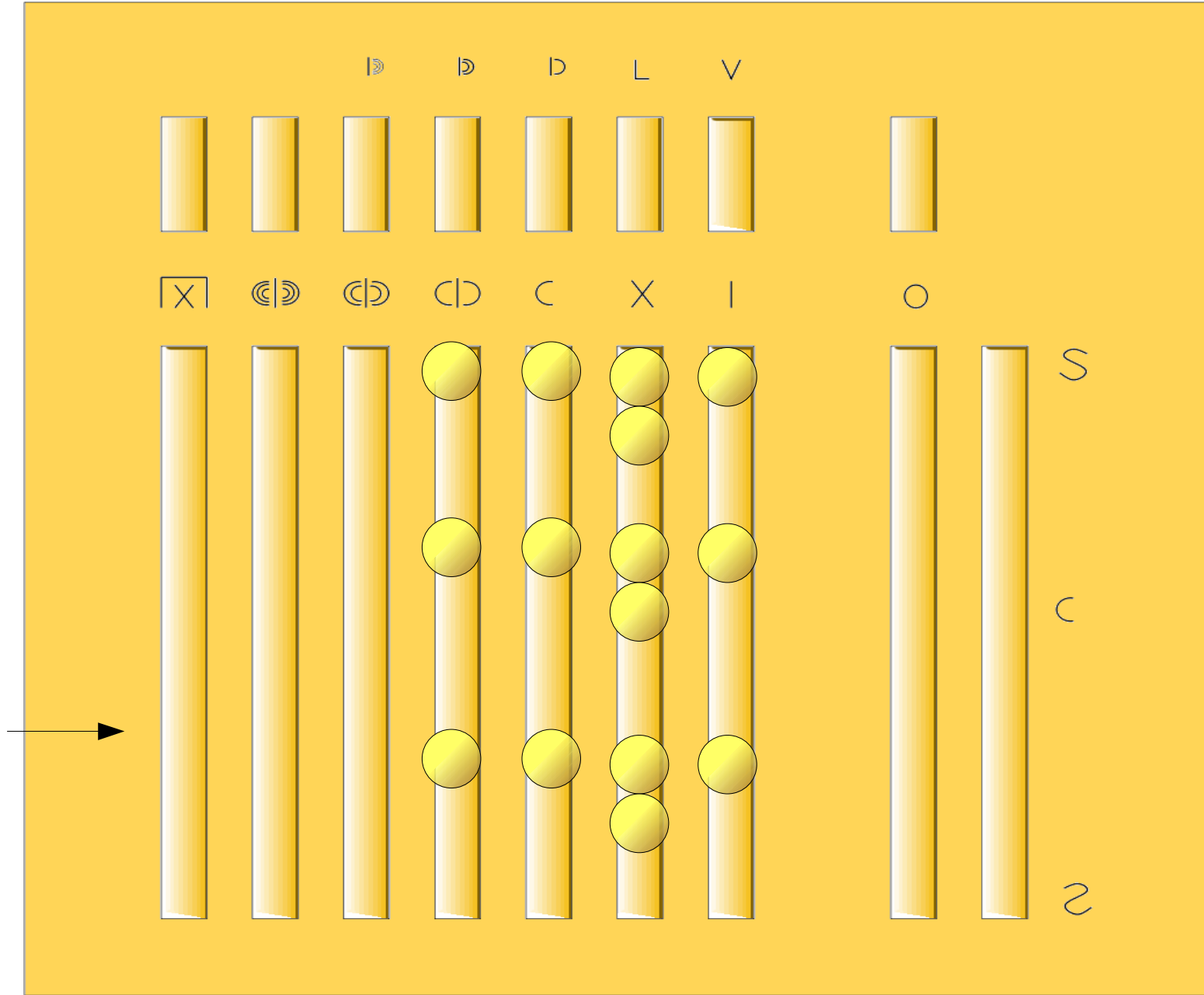
III



MULTIPLICATIO

MCXXI

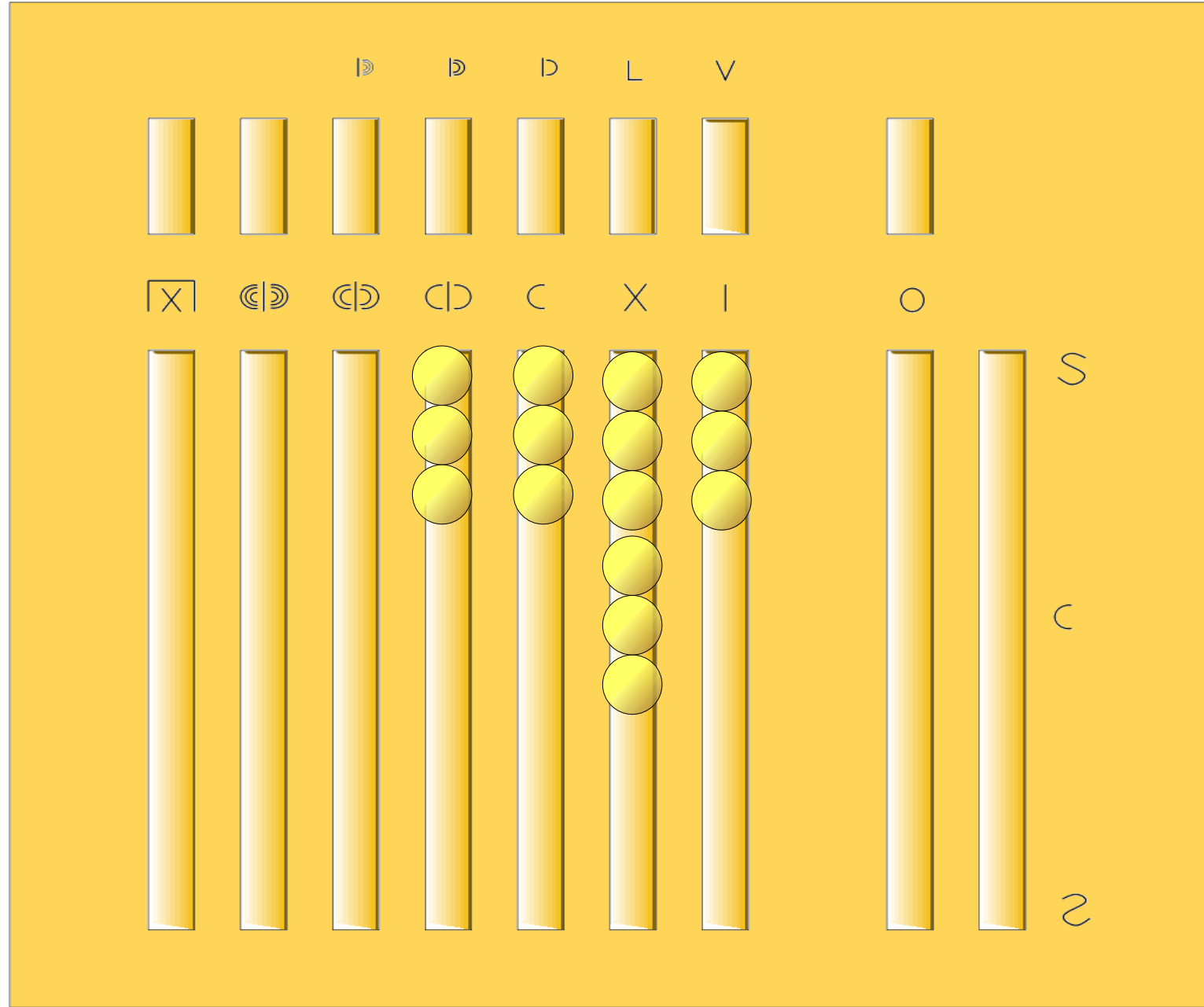
III



MULTIPLICATIO

MCXXI

III



MULTIPLICATIO

MMMCCCLXIII

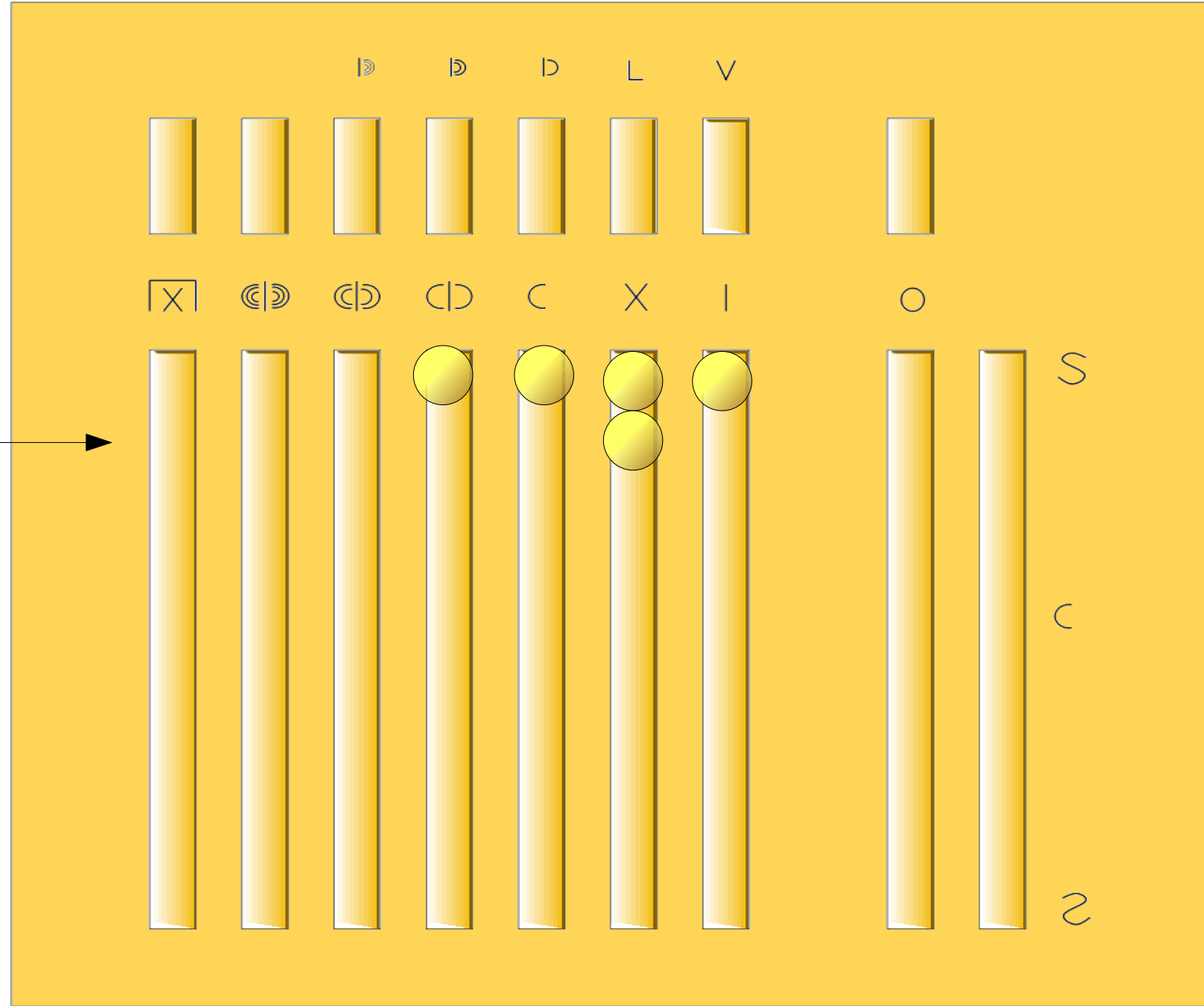


Abacus representation of the Roman numeral MMMCCCLXIII. The abacus has 10 columns. Above the columns are the Roman numerals: D, D, D, L, V. Below the columns are the symbols: X, C, C, C, C, X, I, O. The columns contain the following symbols from left to right: empty, empty, empty, three yellow circles, three yellow circles, one yellow circle, three yellow circles, empty, empty, and empty. To the right of the abacus are the labels S, C, and 2.

MULTIPLICATIO

MCXXI

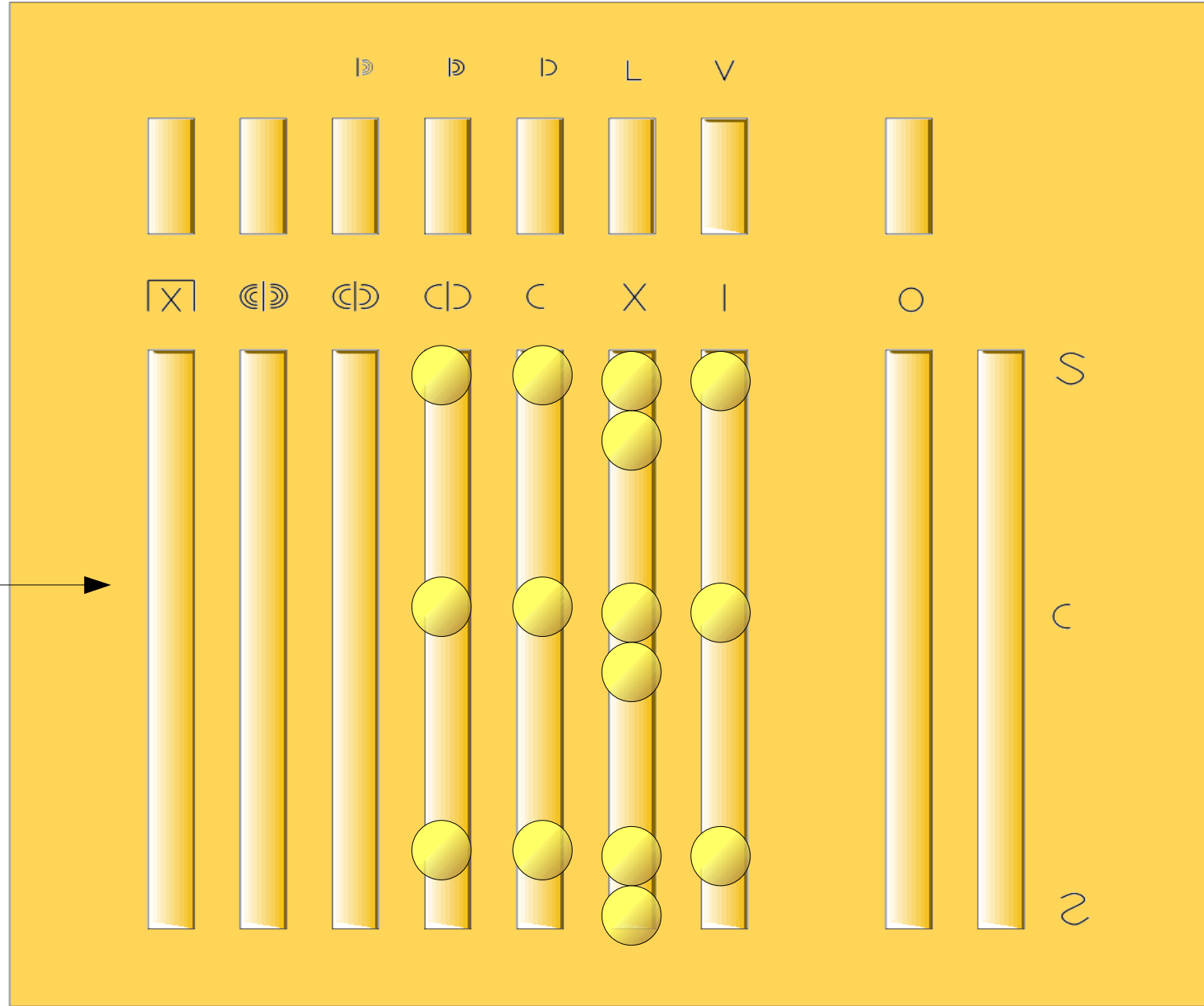
XXXIII



MULTIPLICATIO

MCXXI

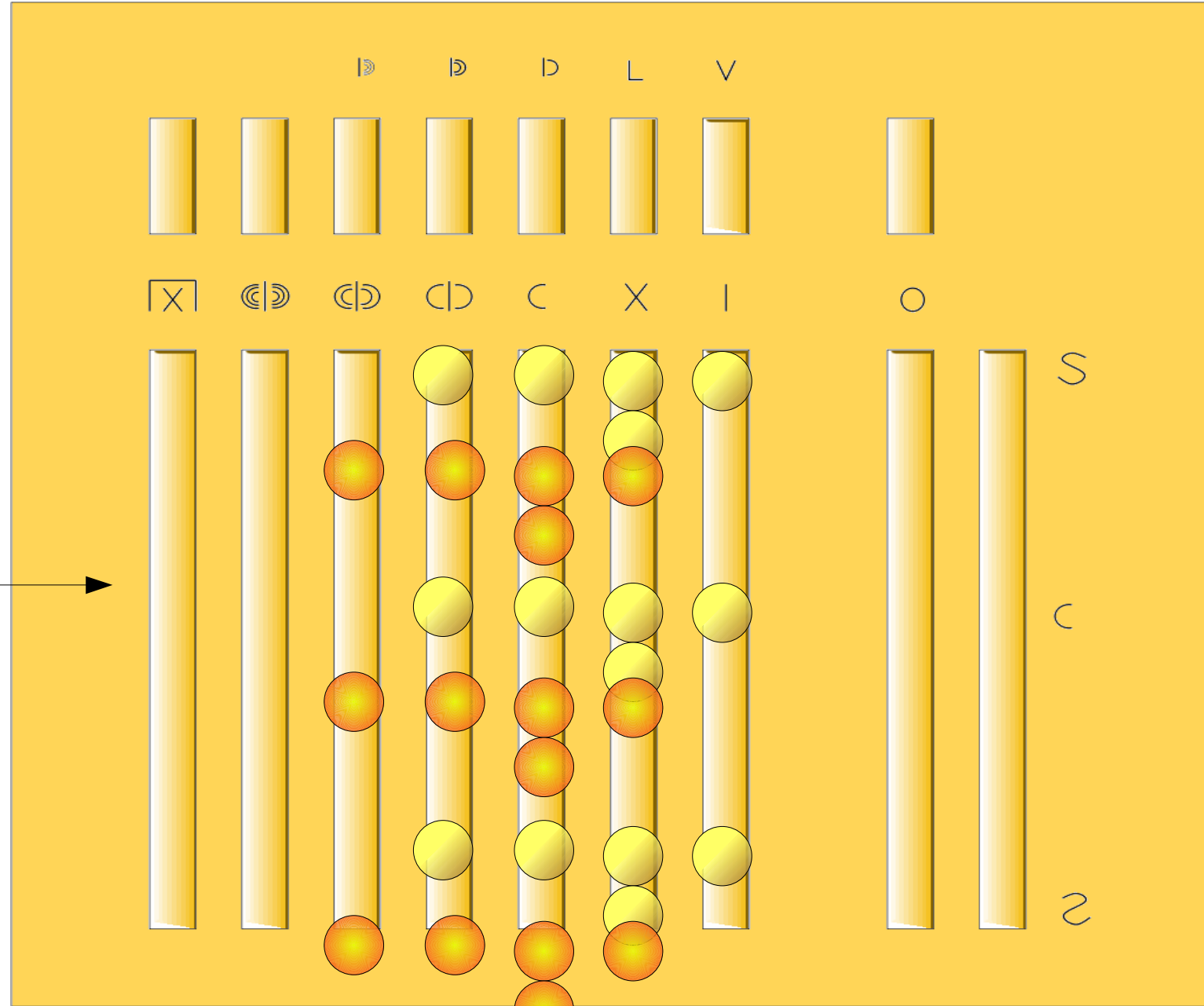
XXXIII



MULTIPLICATIO

MCXXI

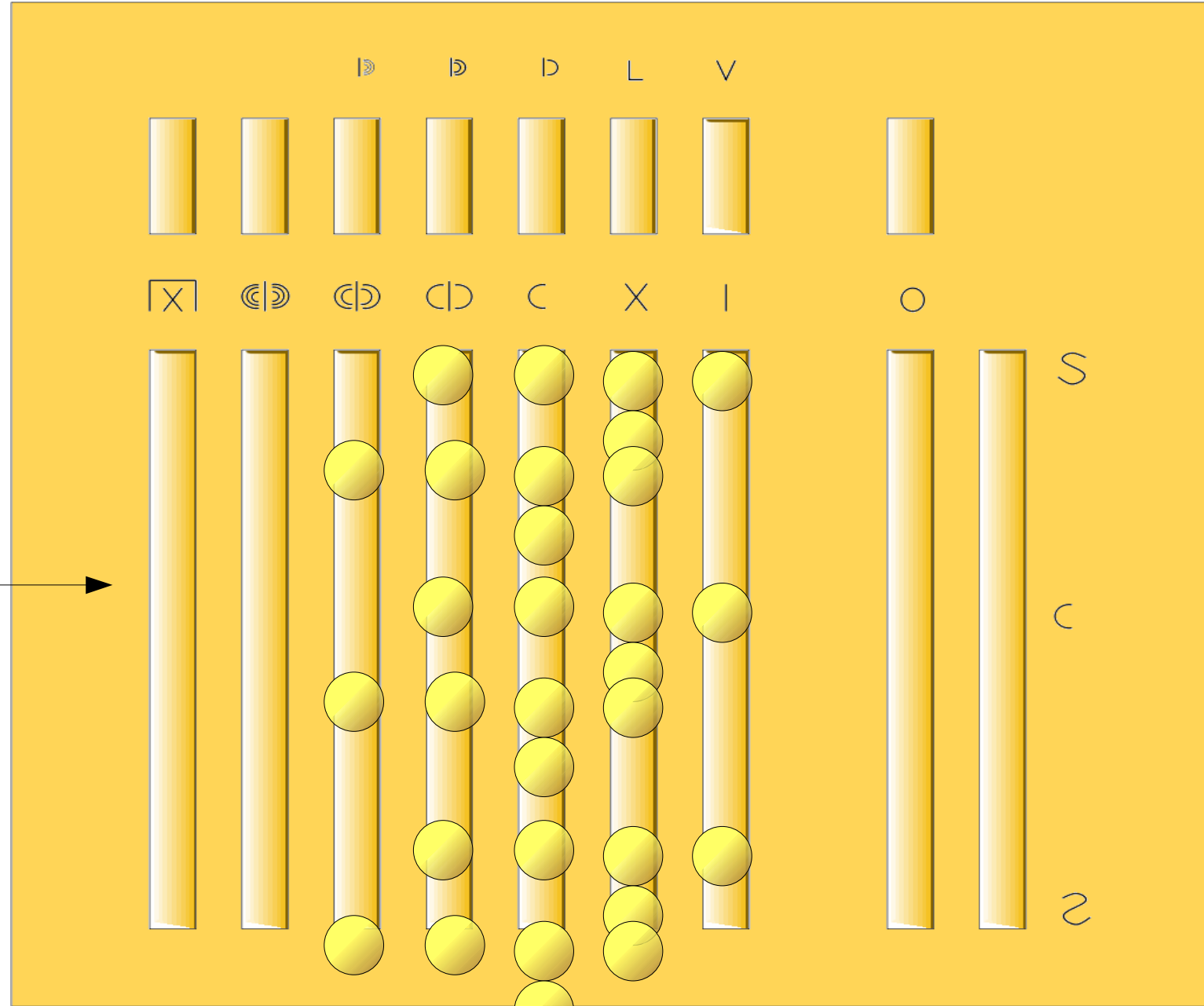
XXXIII



MULTIPLICATIO

MCXXI

XXXIII



S

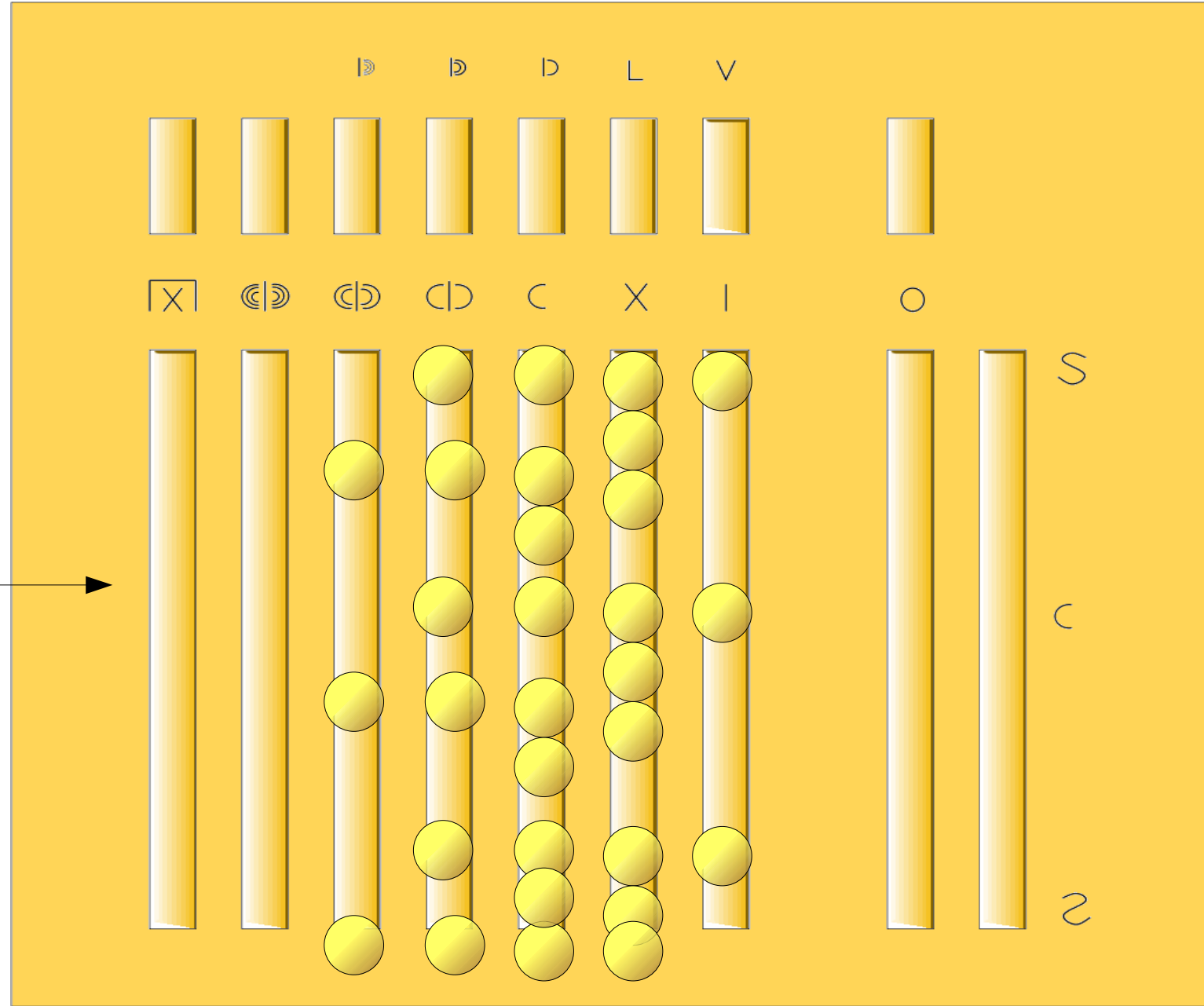
C

2

MULTIPLICATIO

MCXXI

XXXIII



S

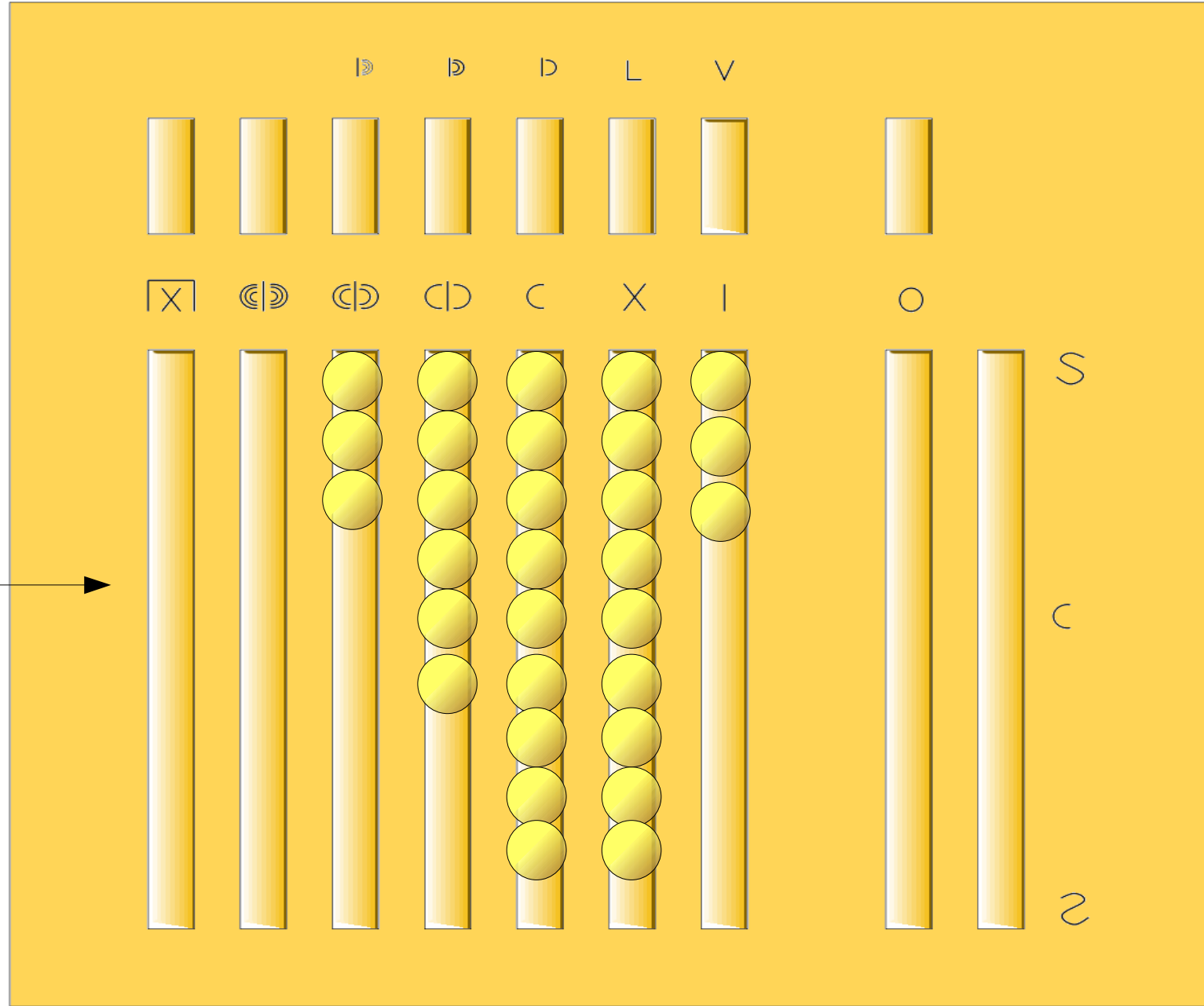
C

2

MULTIPLICATIO

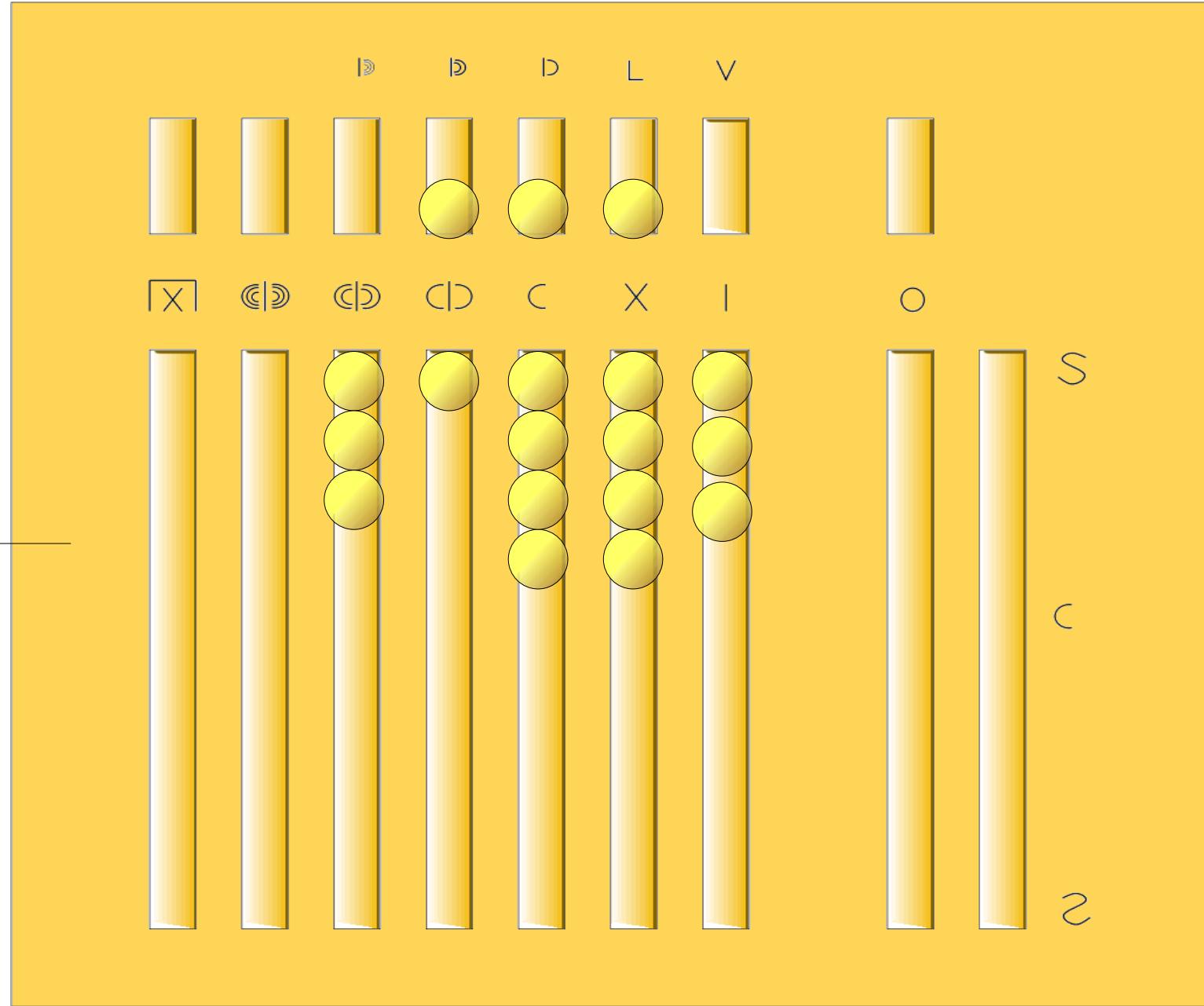
MCXXI

XXXIII



MULTIPLICATIO

⊕⊕⊕
D̄ MDCCCC
LXXXIII ←



MULTIPLICATIO

MCXXI

MCXXIII



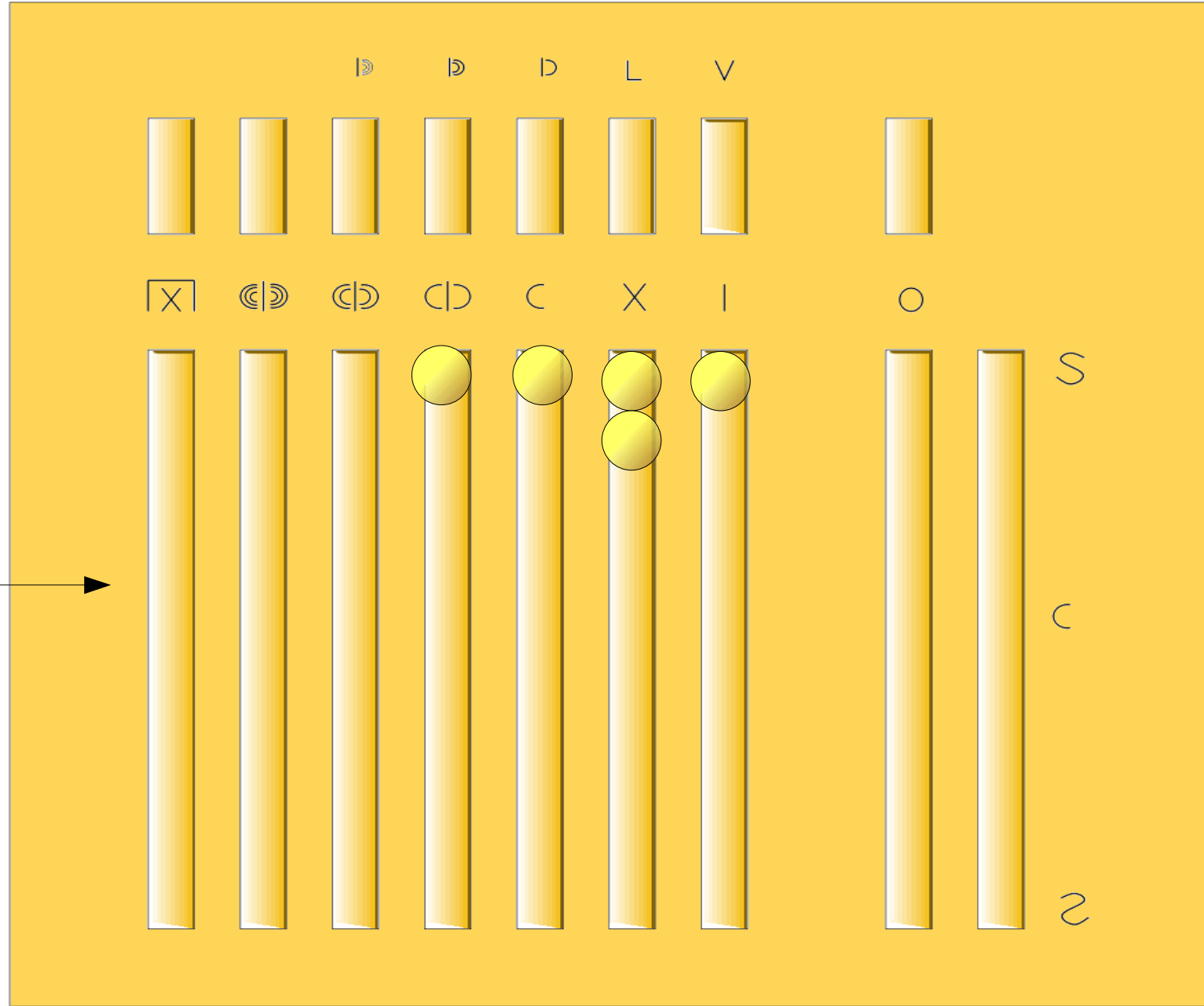
Abacus representation of the number MCXXIII. The abacus has 10 columns. Above the columns are the Roman numerals: D, D, D, L, V. Below the columns are the Roman numerals: X, C, C, C, C, X, I, O. To the right of the abacus are the labels S, C, and 2.

Column	1	2	3	4	5	6	7	8	9	10
Label			D	D	D	L	V			
Symbol	X	C	C	C	C	X	I	O		
Label								S	C	2

MULTIPLICATIO

MCXXI

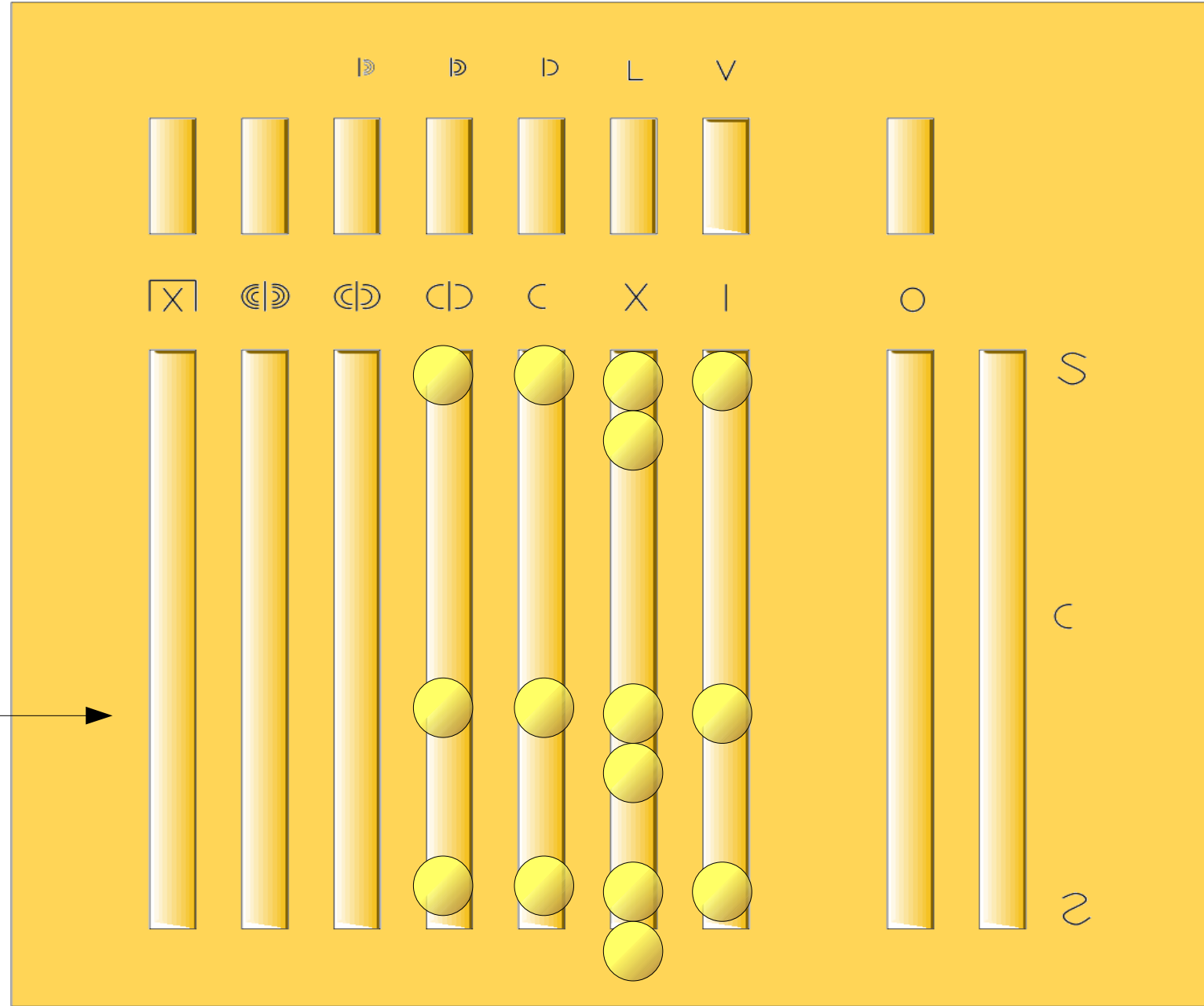
MCXXIII



MULTIPLICATIO

MCXXI

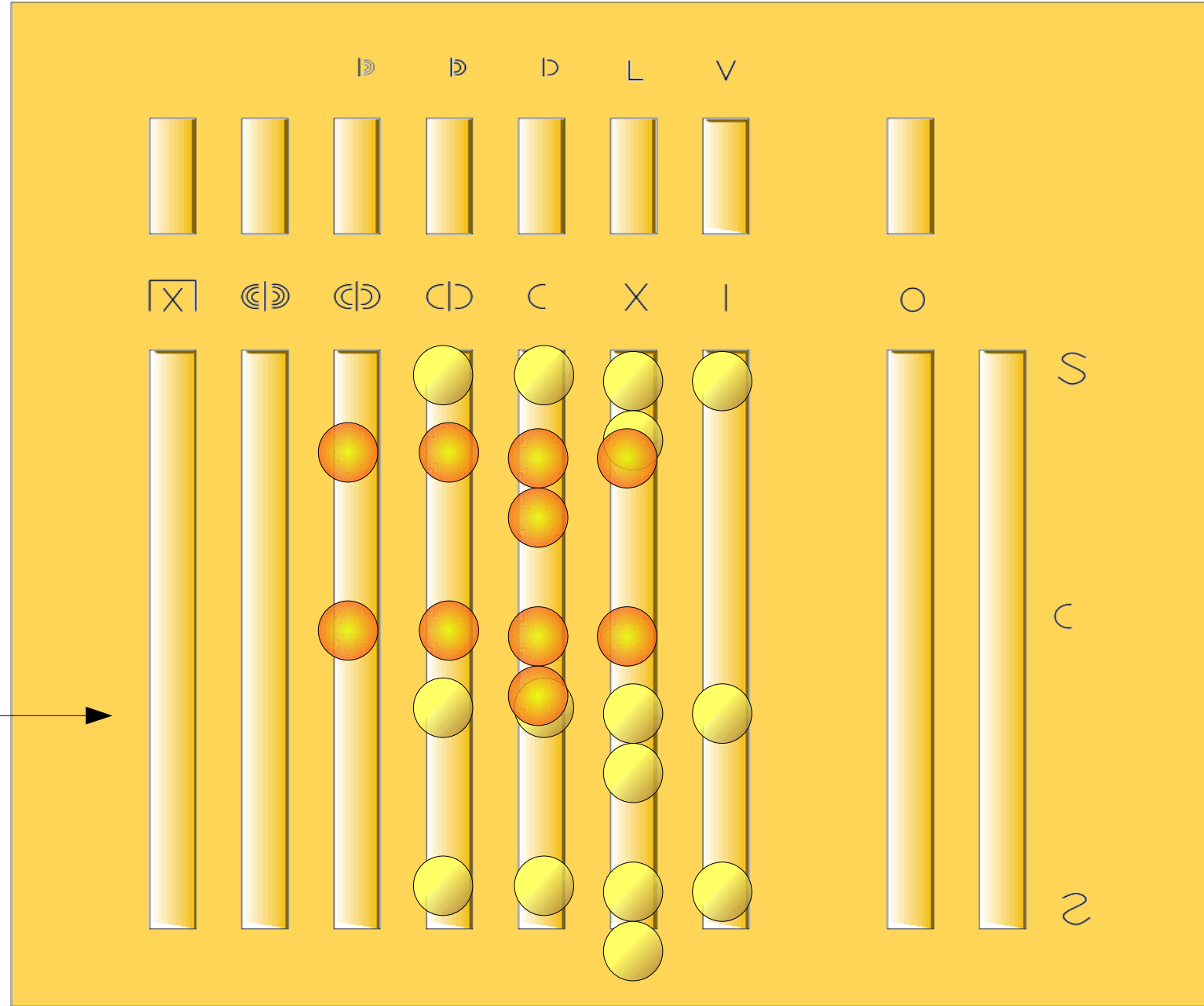
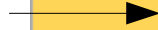
MCXXIII



MULTIPLICATIO

MCXXI

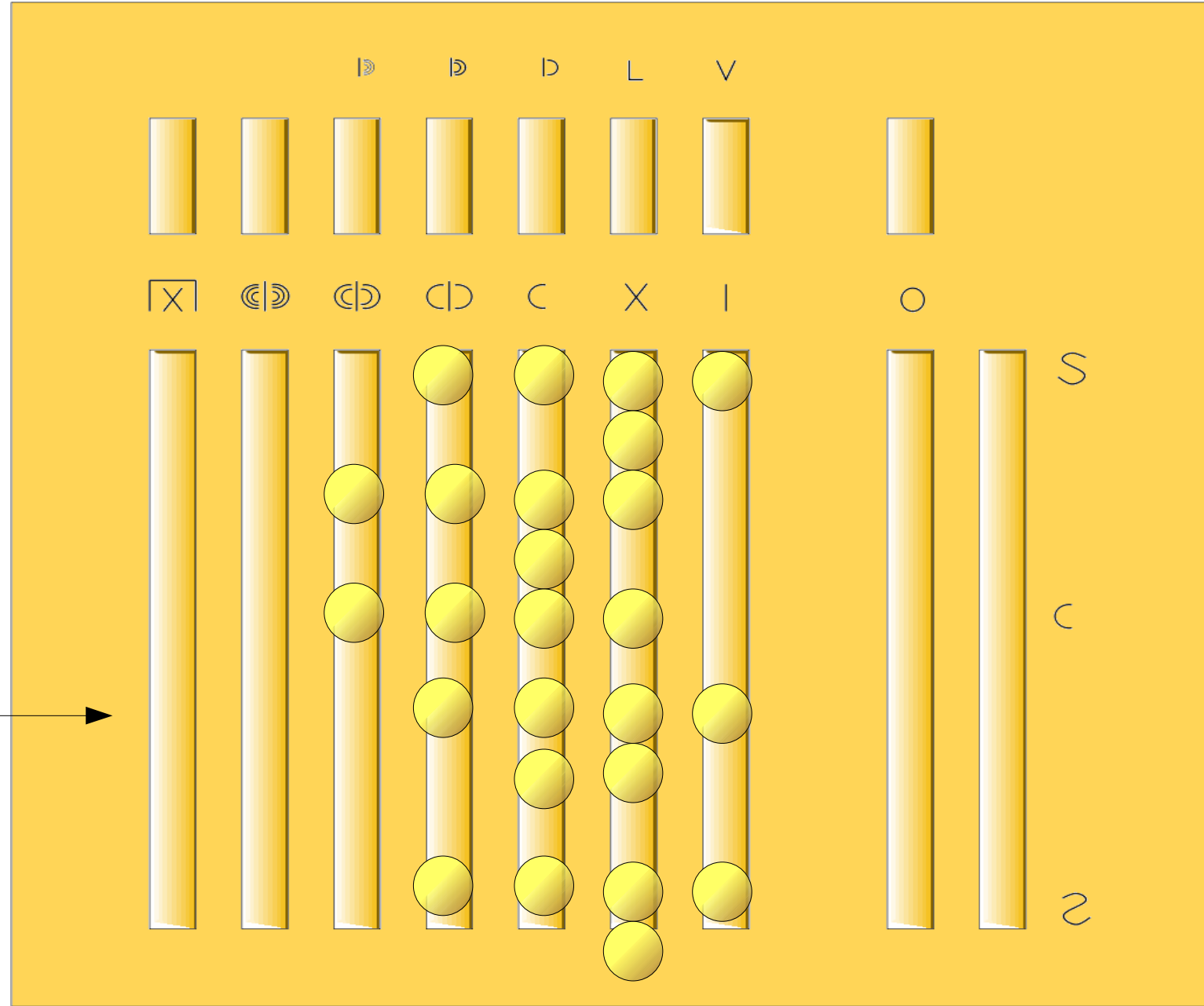
MCXXIII



MULTIPLICATIO

MCXXI

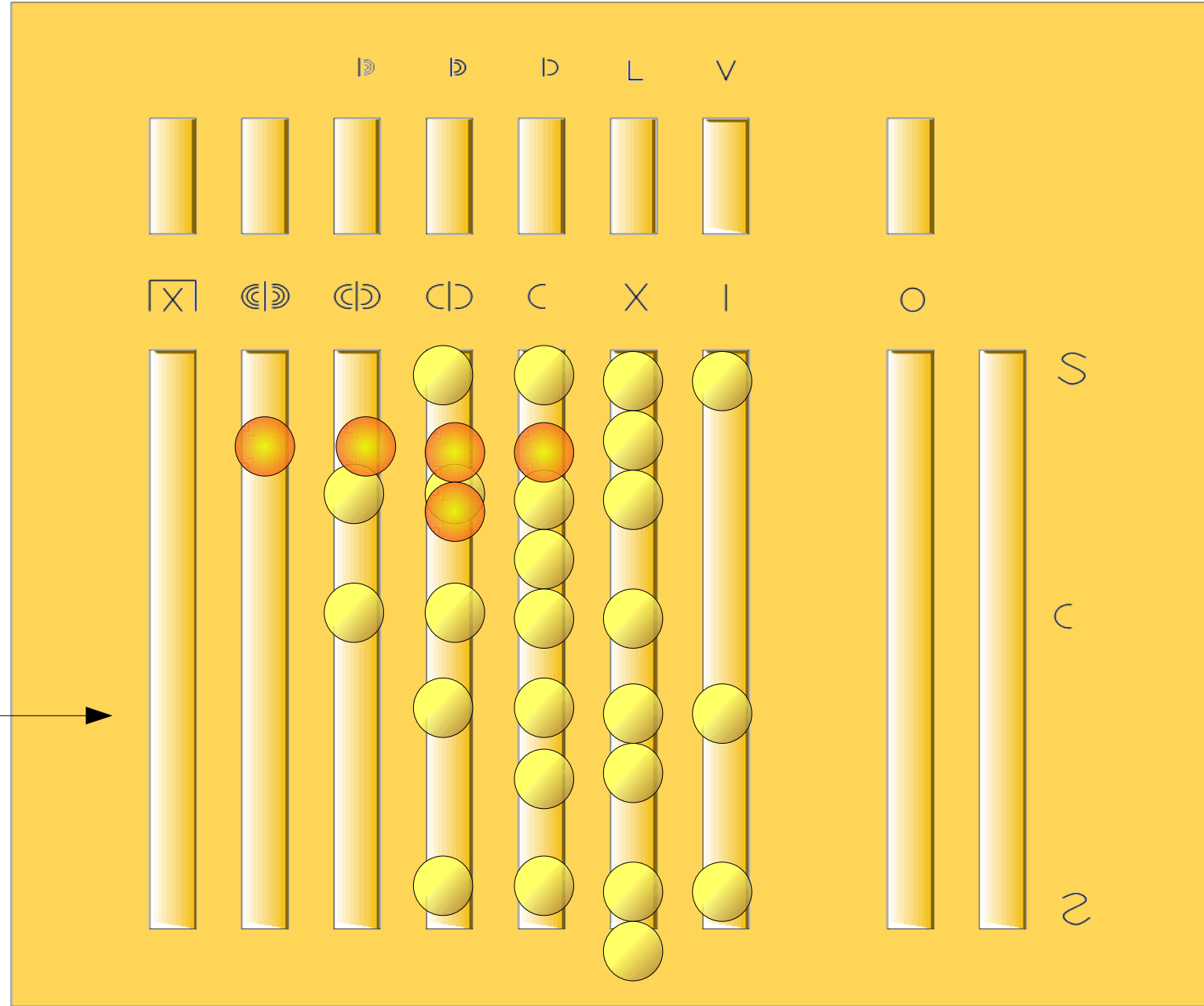
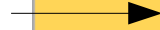
MCXXIII



MULTIPLICATIO

MCXXI

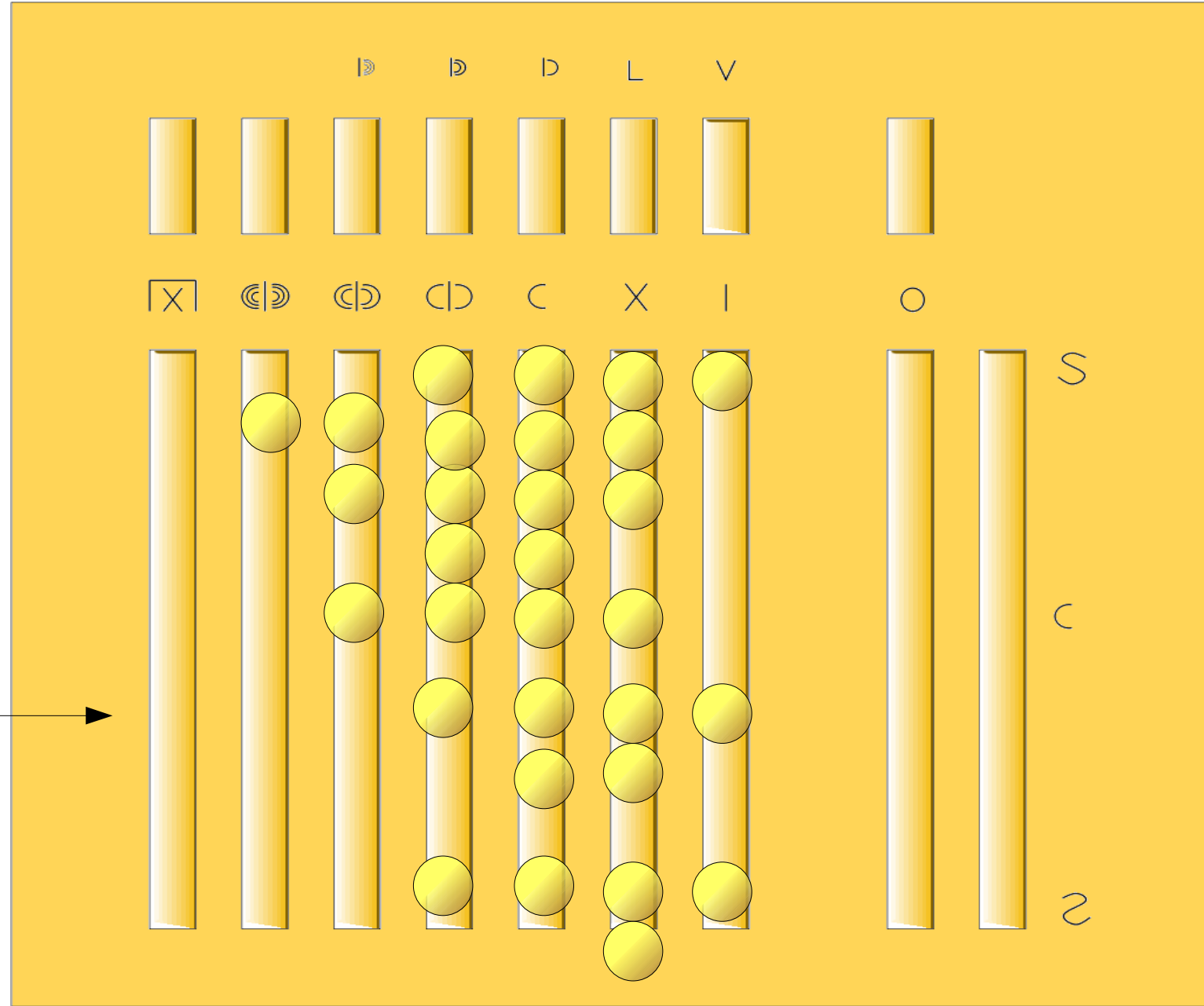
MCXXIII



MULTIPLICATIO

MCXXI

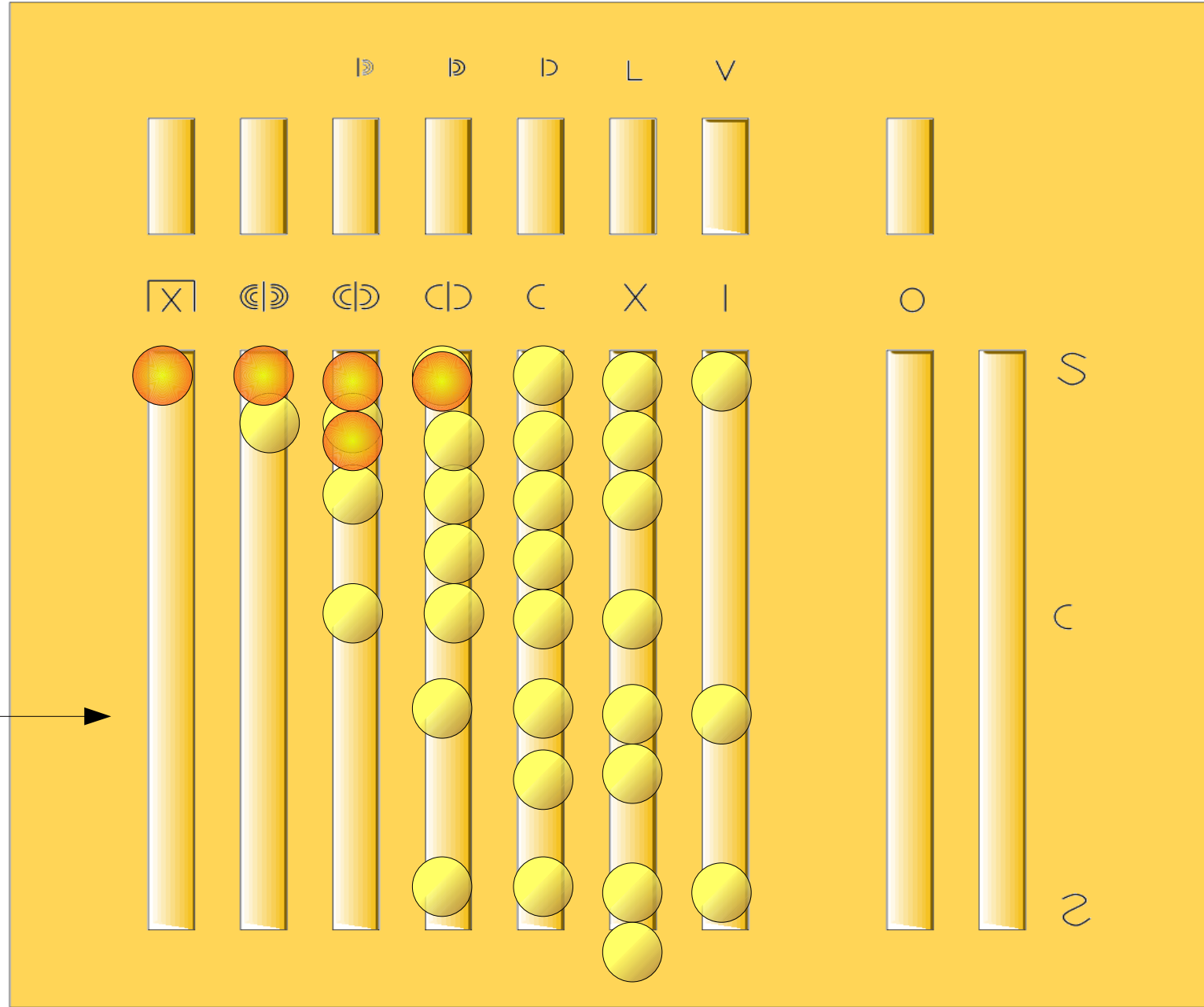
MCXXIII



MULTIPLICATIO

MCXXI

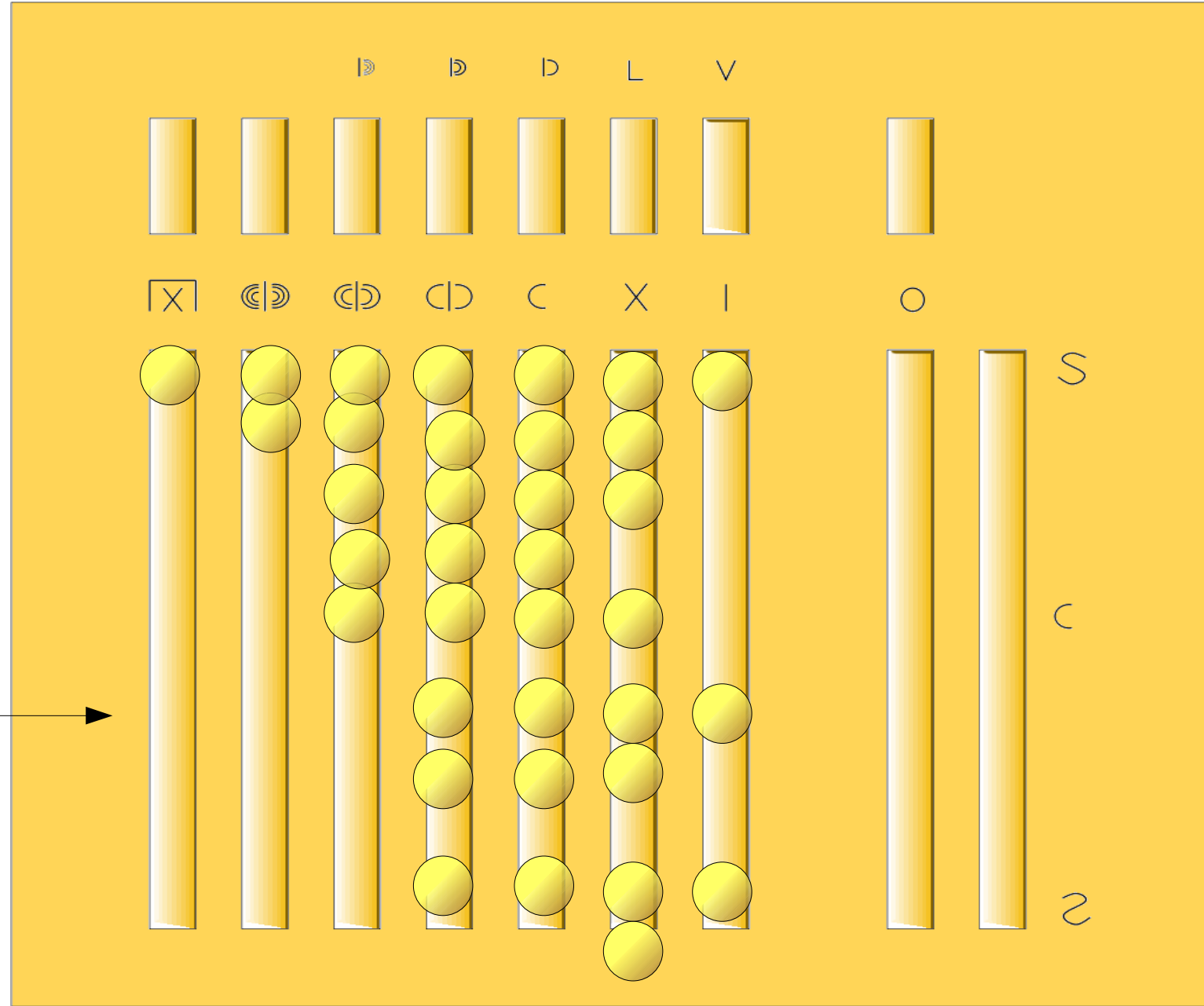
MCXXIII



MULTIPLICATIO

MCXXI

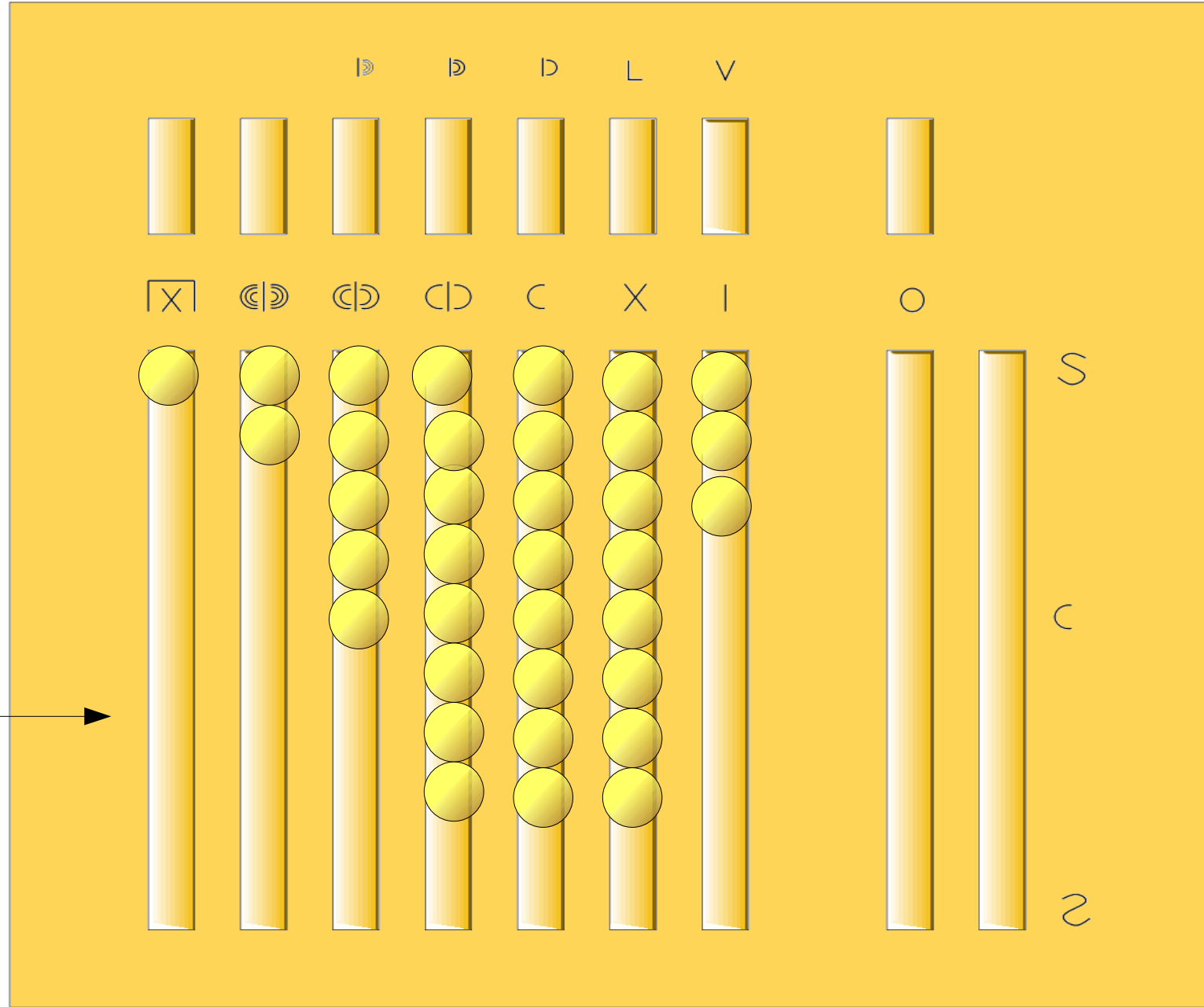
MCXXIII



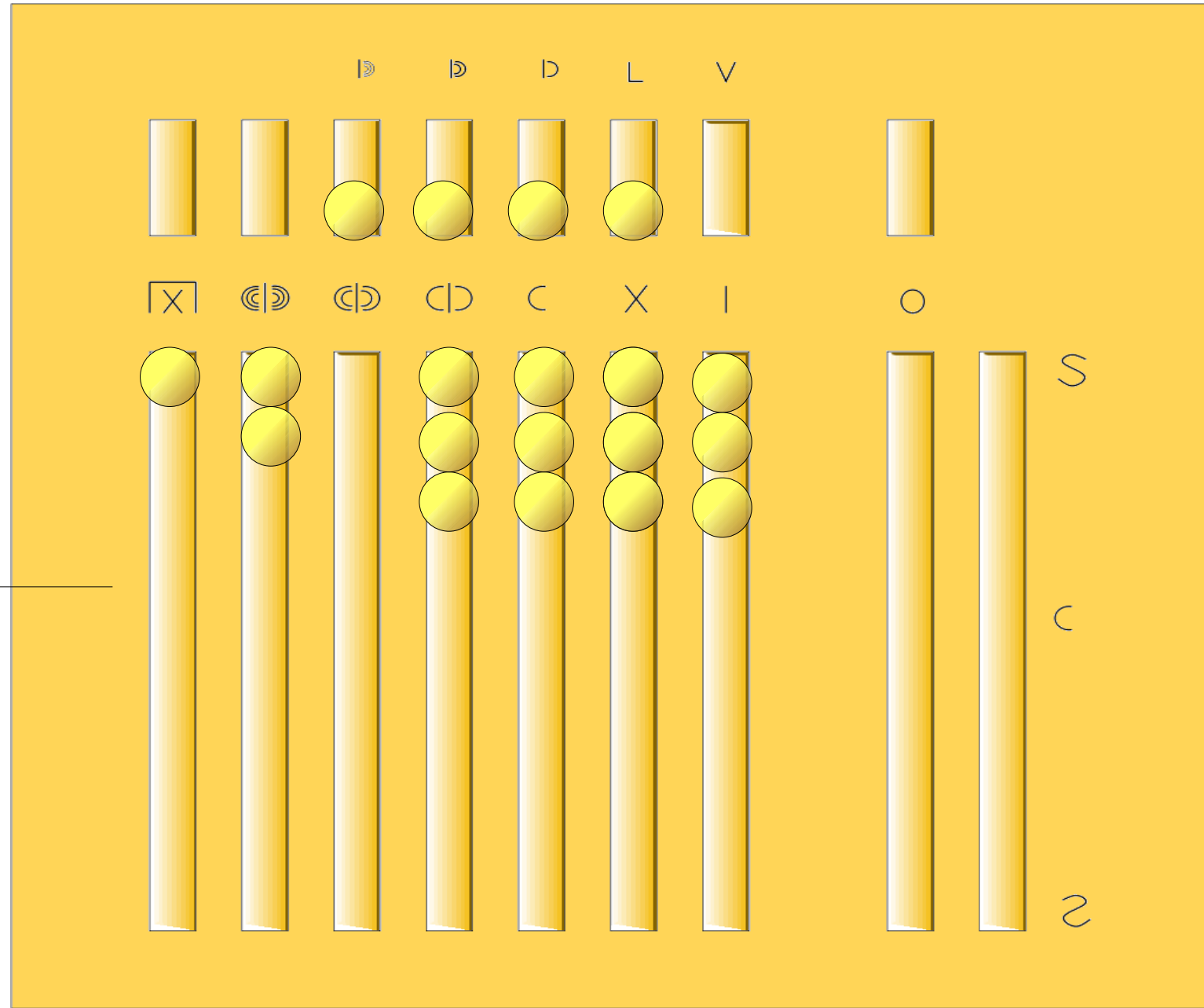
MULTIPLICATIO

MCXXI

MCXXIII



MULTIPLICATIO



X C C D

D MMM

$DCCC$

$LXXXIII$



MULTIPLICATIO

MCXXI

LXVI



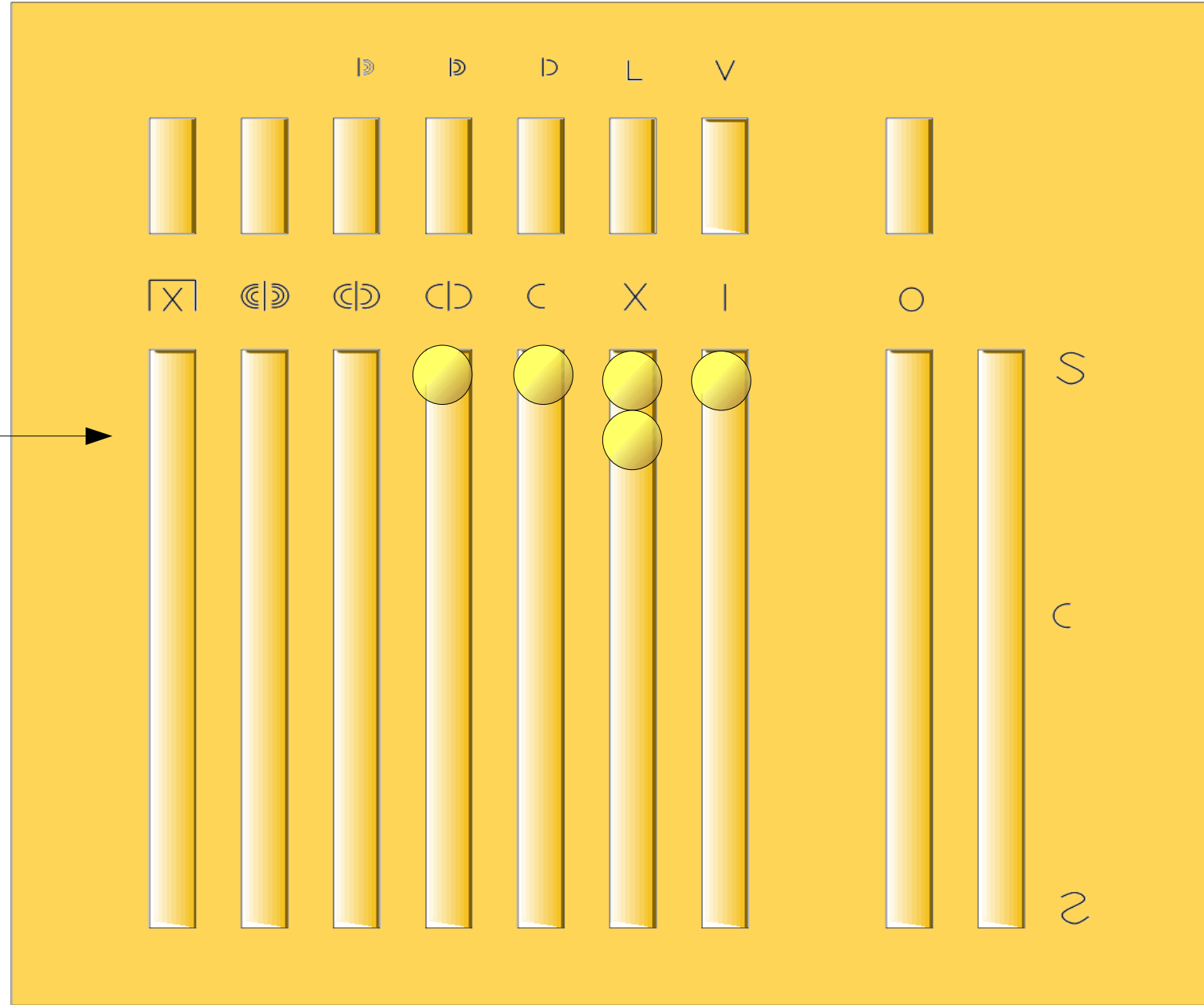
Abacus for Roman numeral multiplication. The top row of beads is labeled with the Roman numerals D, D, D, L, V. The bottom row of beads is labeled with the Roman numerals S, C, and 2. The abacus has 10 columns of beads. The top row has 7 beads, and the bottom row has 9 beads. The beads are arranged as follows:

Column	Top Row	Bottom Row
1		X
2		CC
3	D	CC
4	D	CD
5	D	C
6	L	X
7	V	I
8		O
9		S
10		C
11		2

MULTIPLICATIO

MCXXI

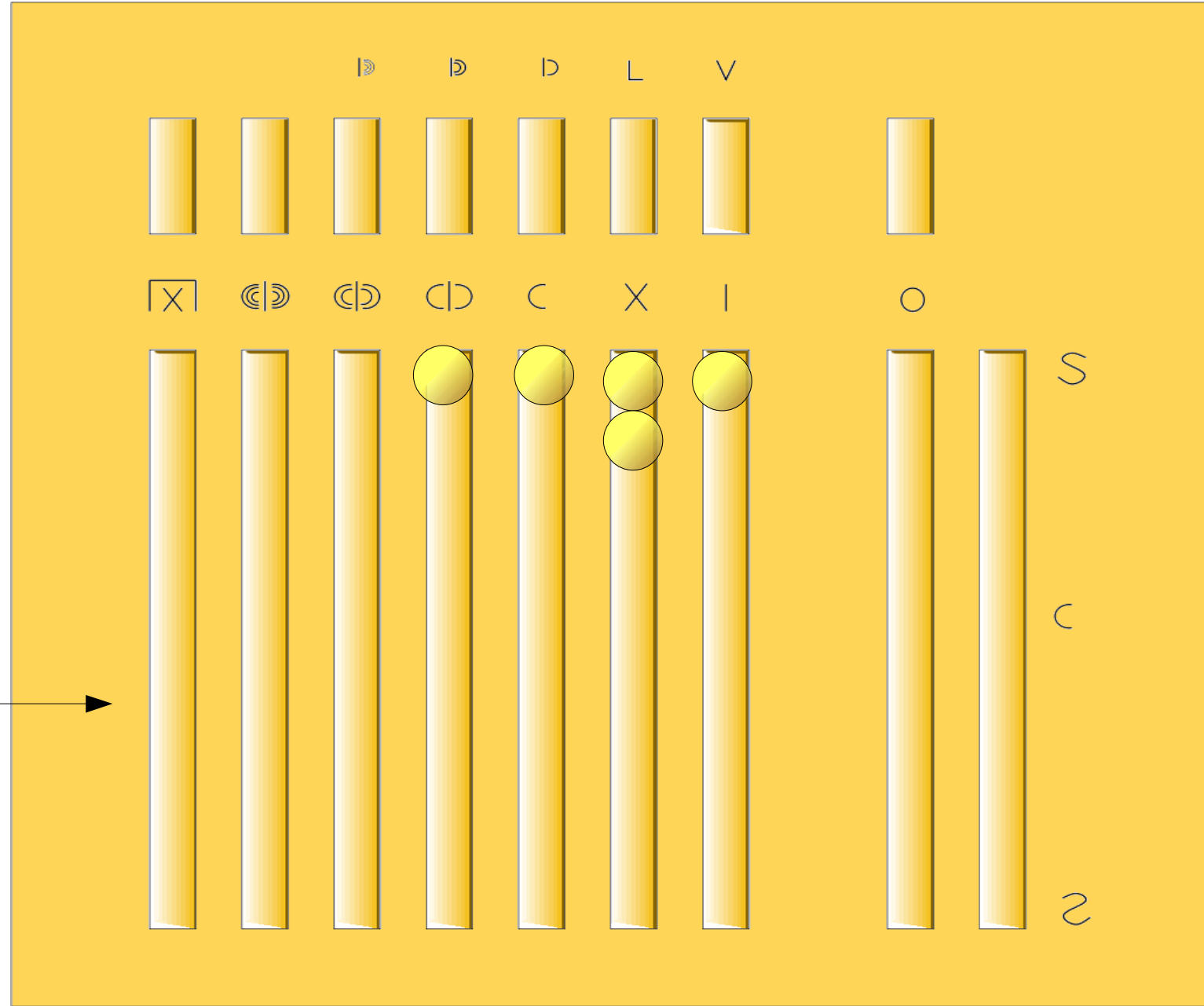
LXVI



MULTIPLICATIO

MCXXI

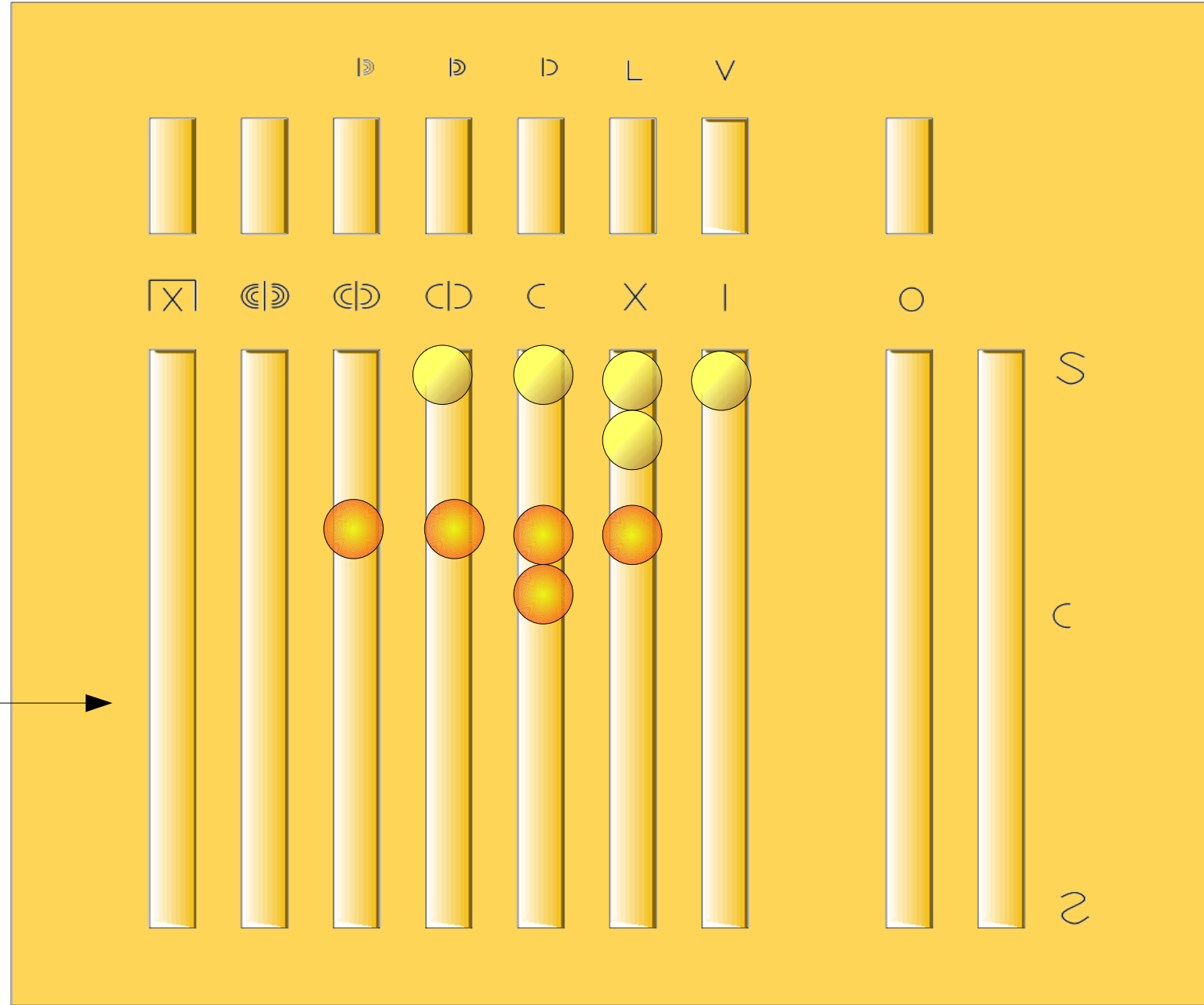
LXVI



MULTIPLICATIO

MCXXI

LXVI

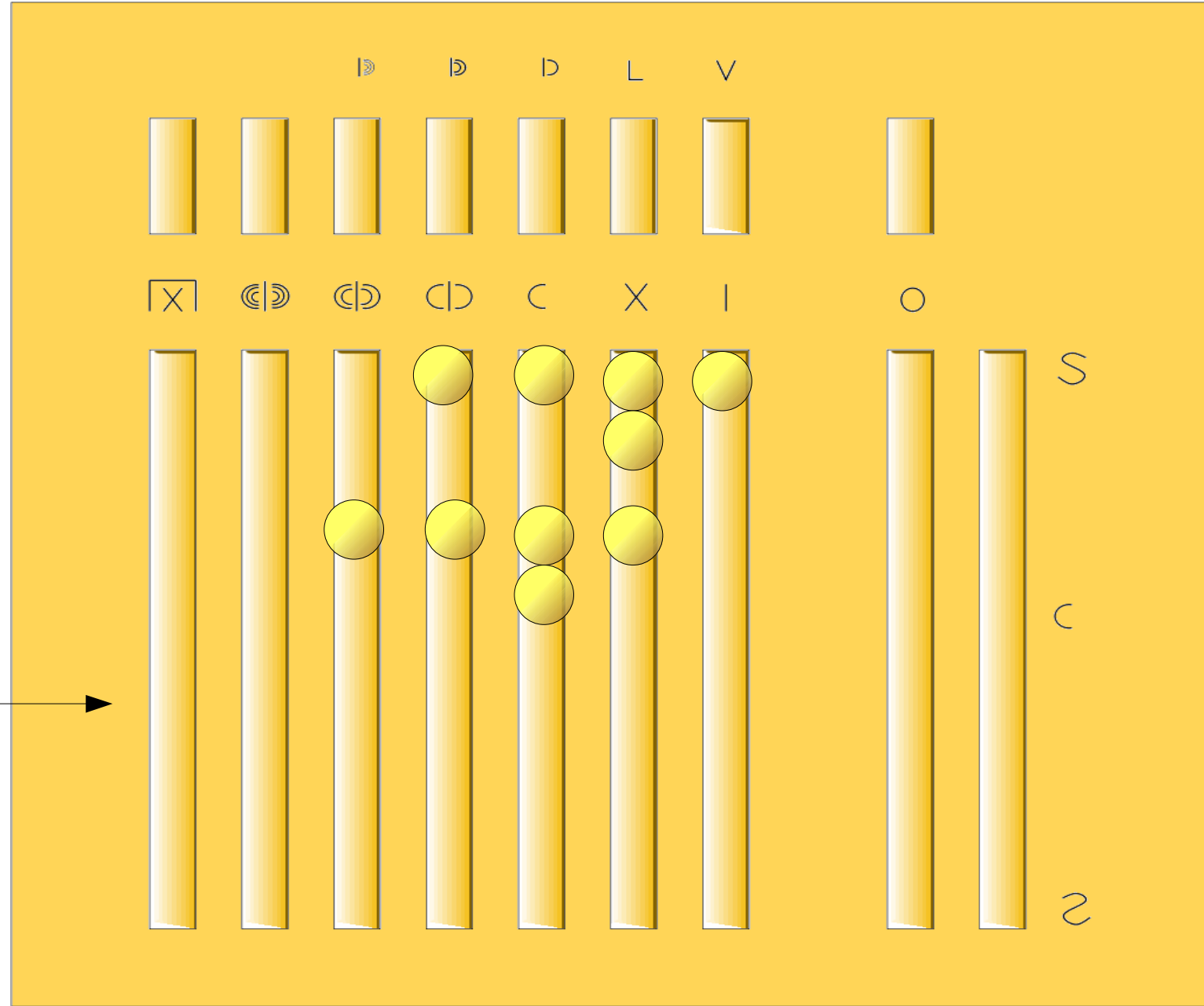


MULTIPLICATIO

MCXXI

LXVI

?

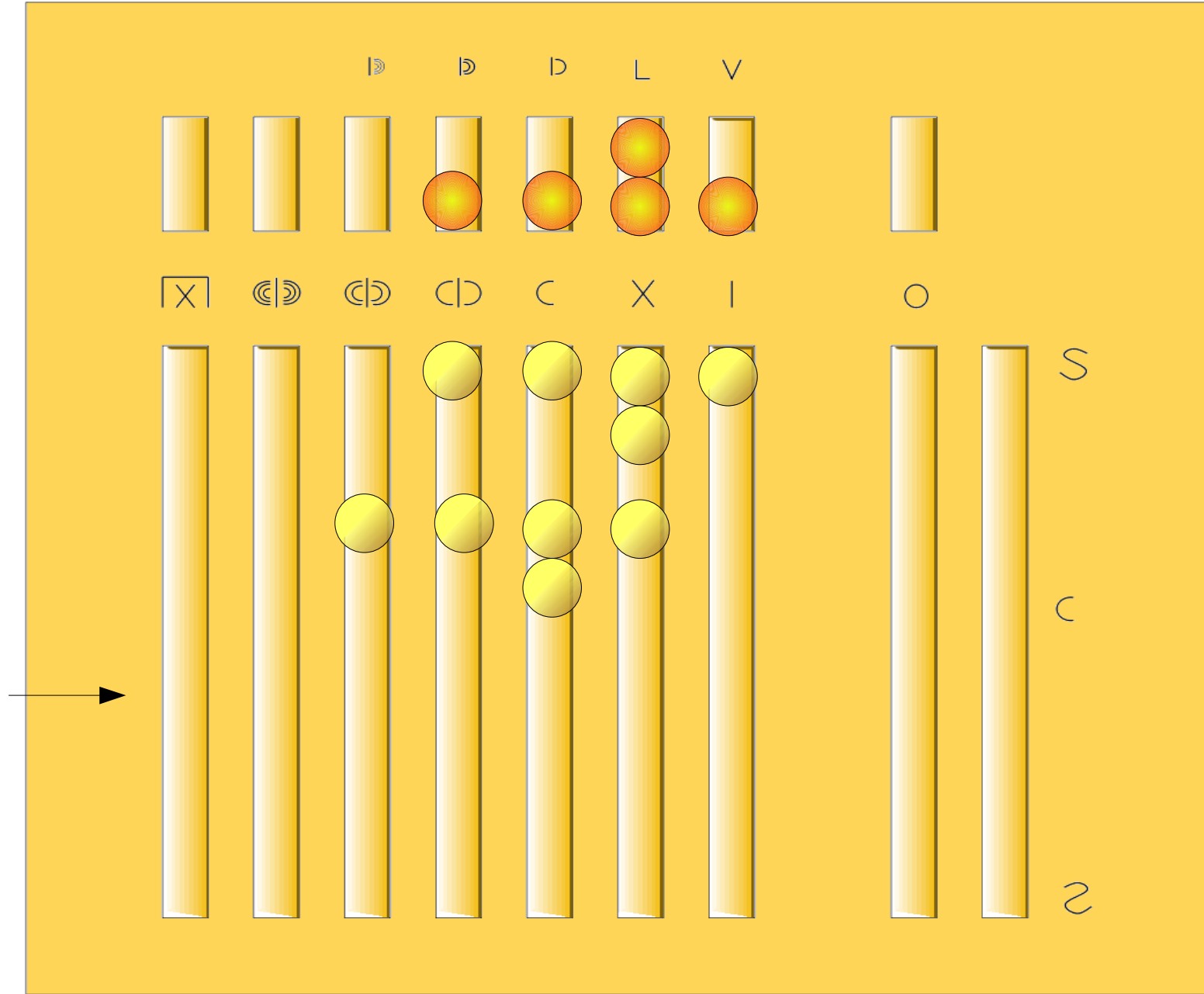


MULTIPLICATIO

MCXXI

LXVI

?

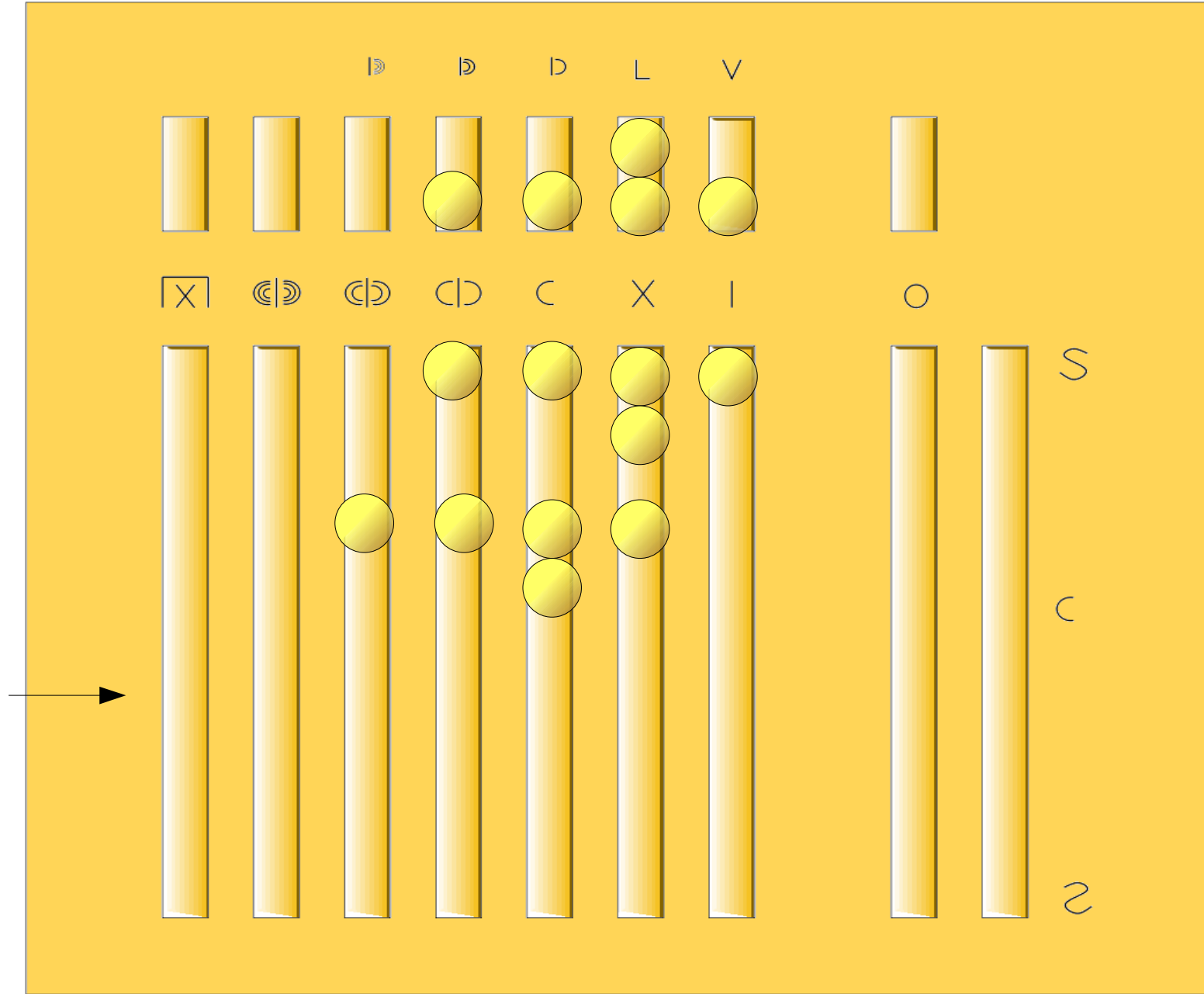


MULTIPLICATIO

MCXXI

LXVI

?

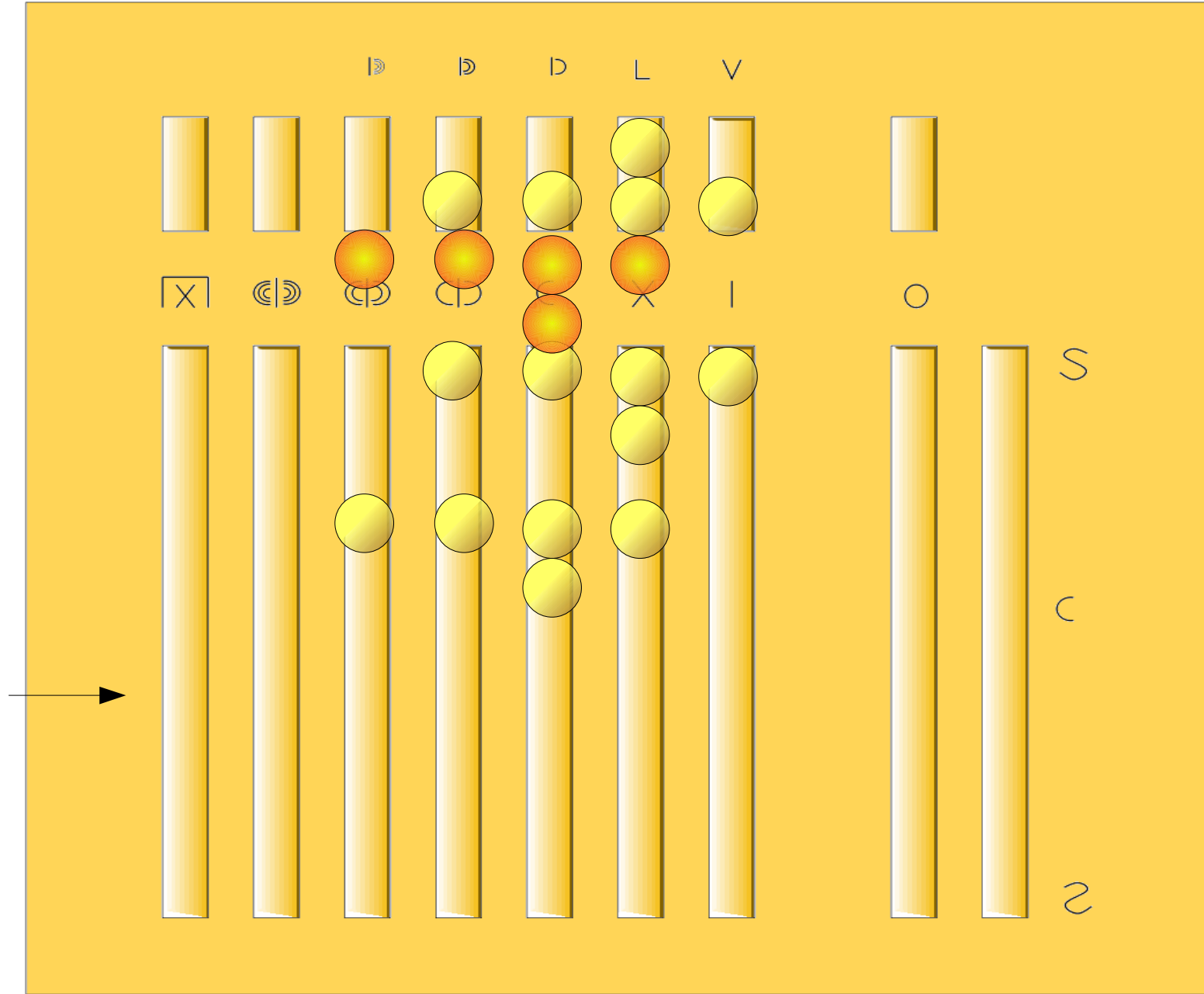


MULTIPLICATIO

MCXXI

LXVI

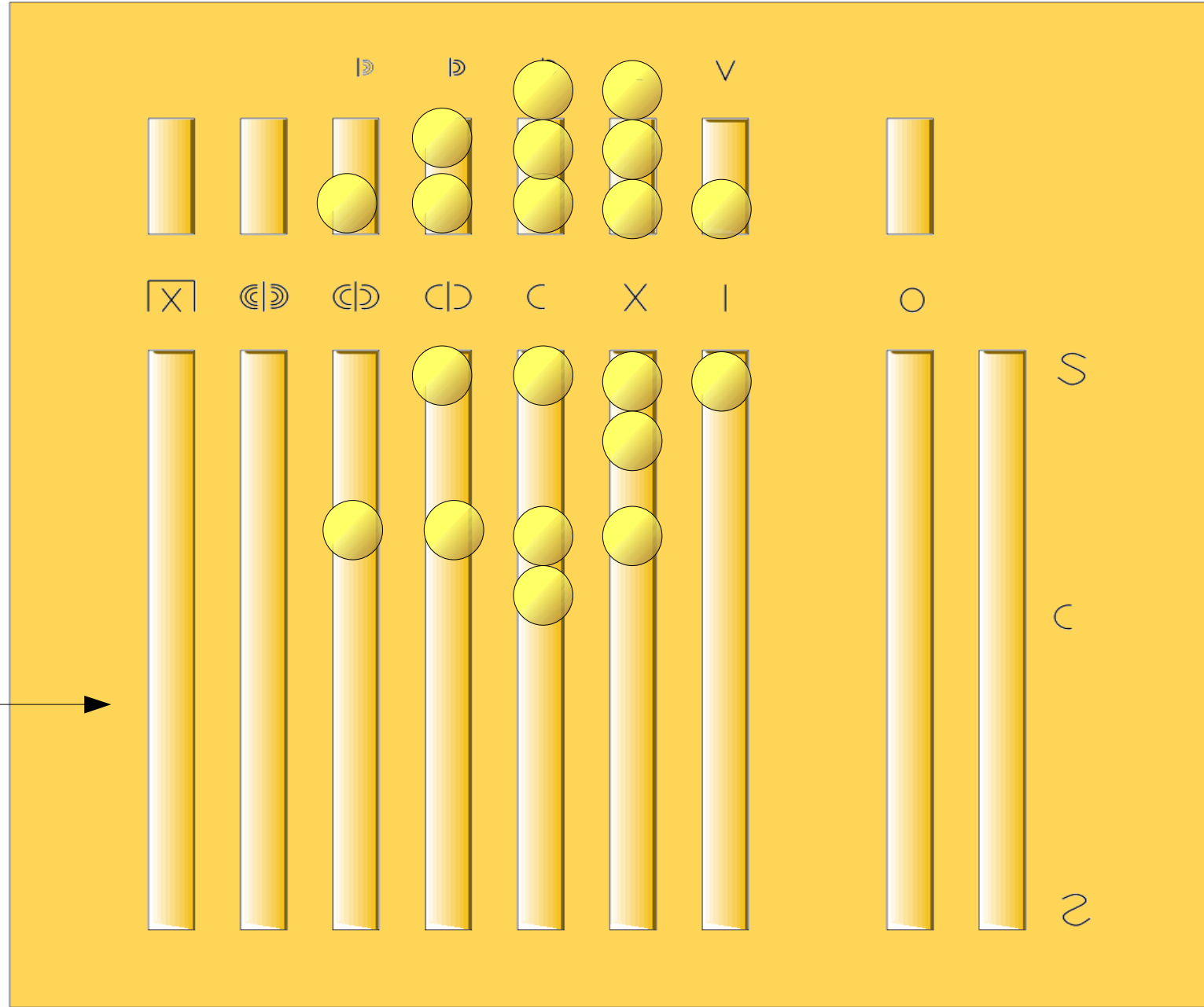
?



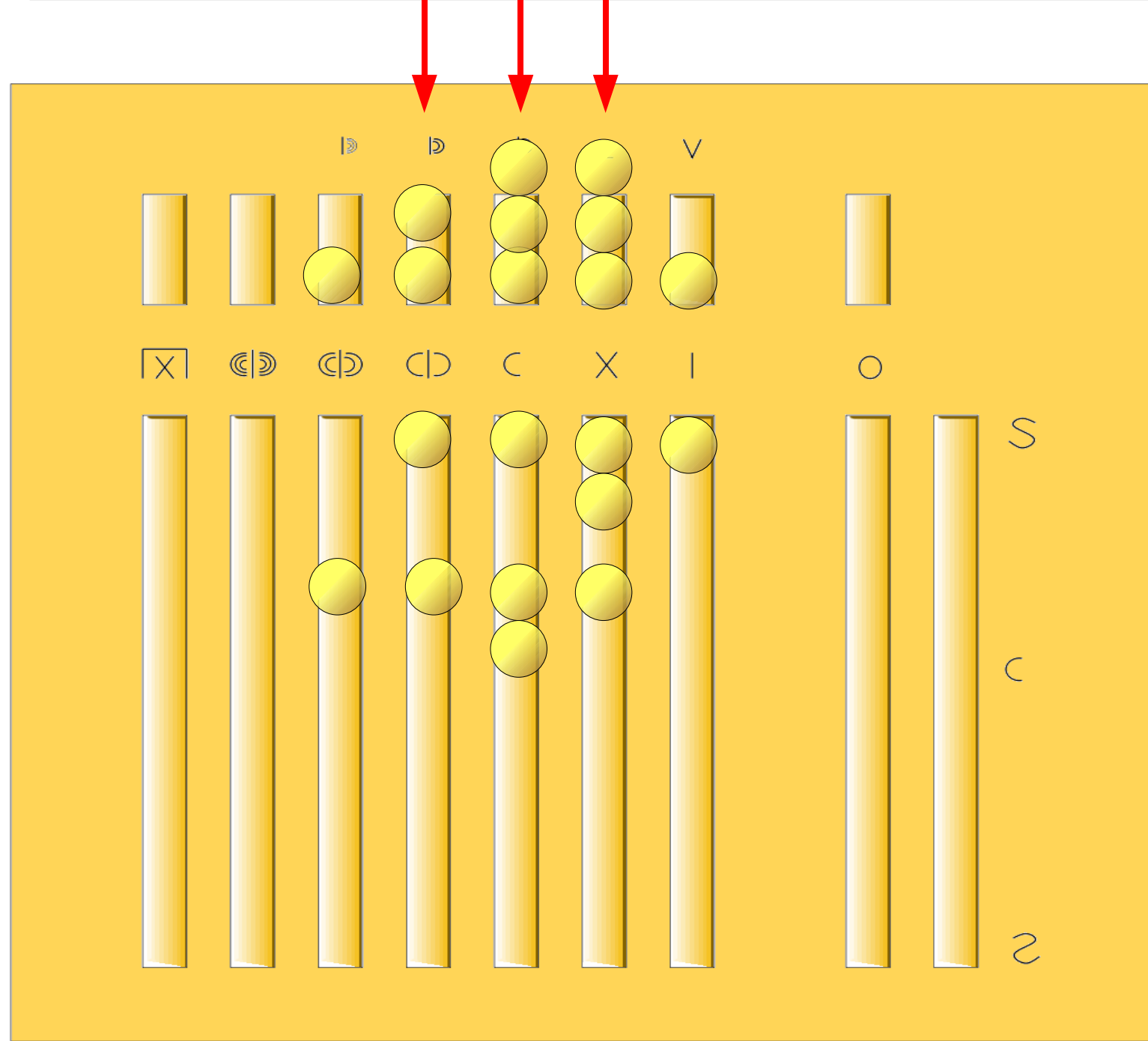
MULTIPLICATIO

MCXXI

LXVI



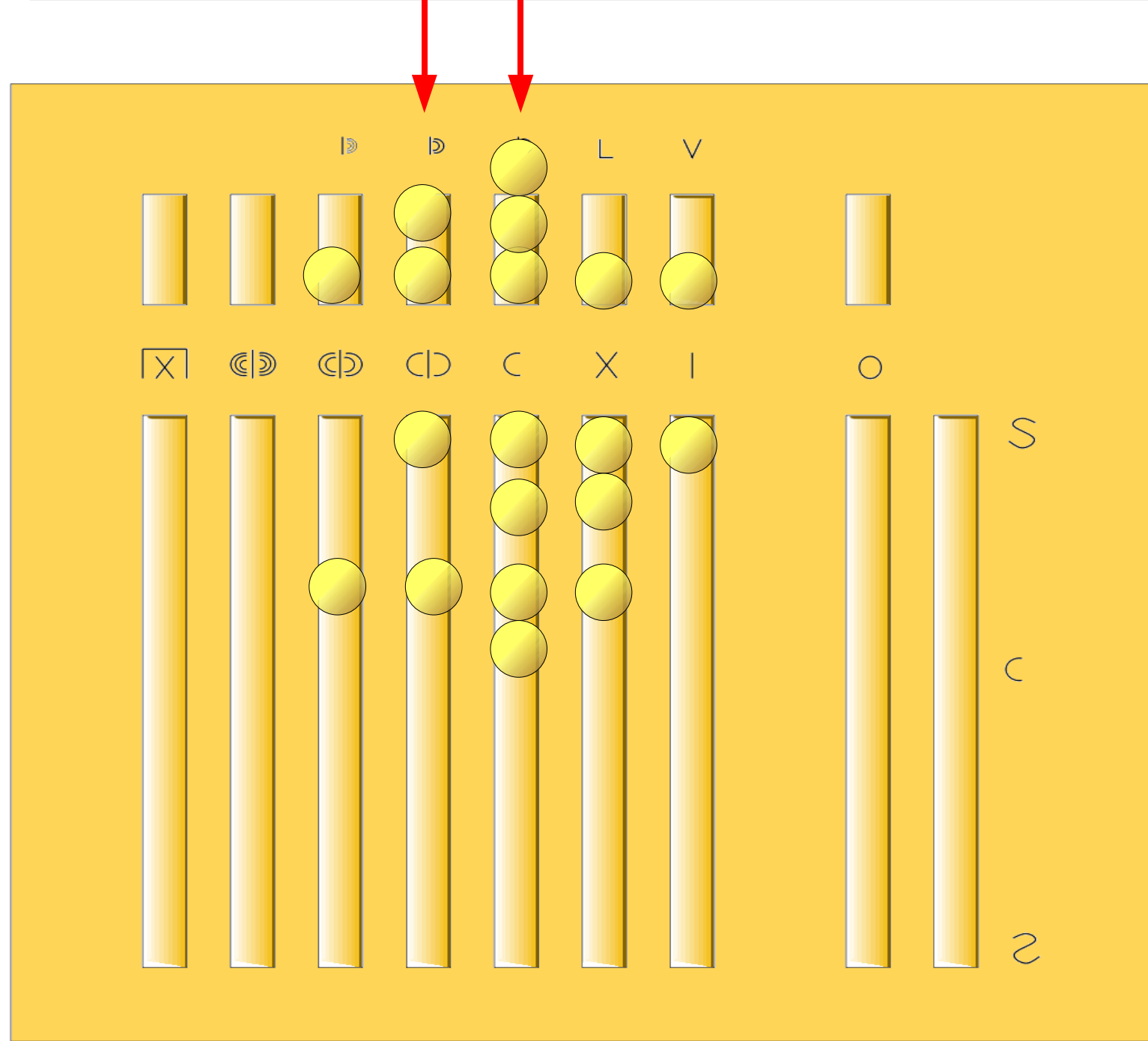
MULTIPLICATIO



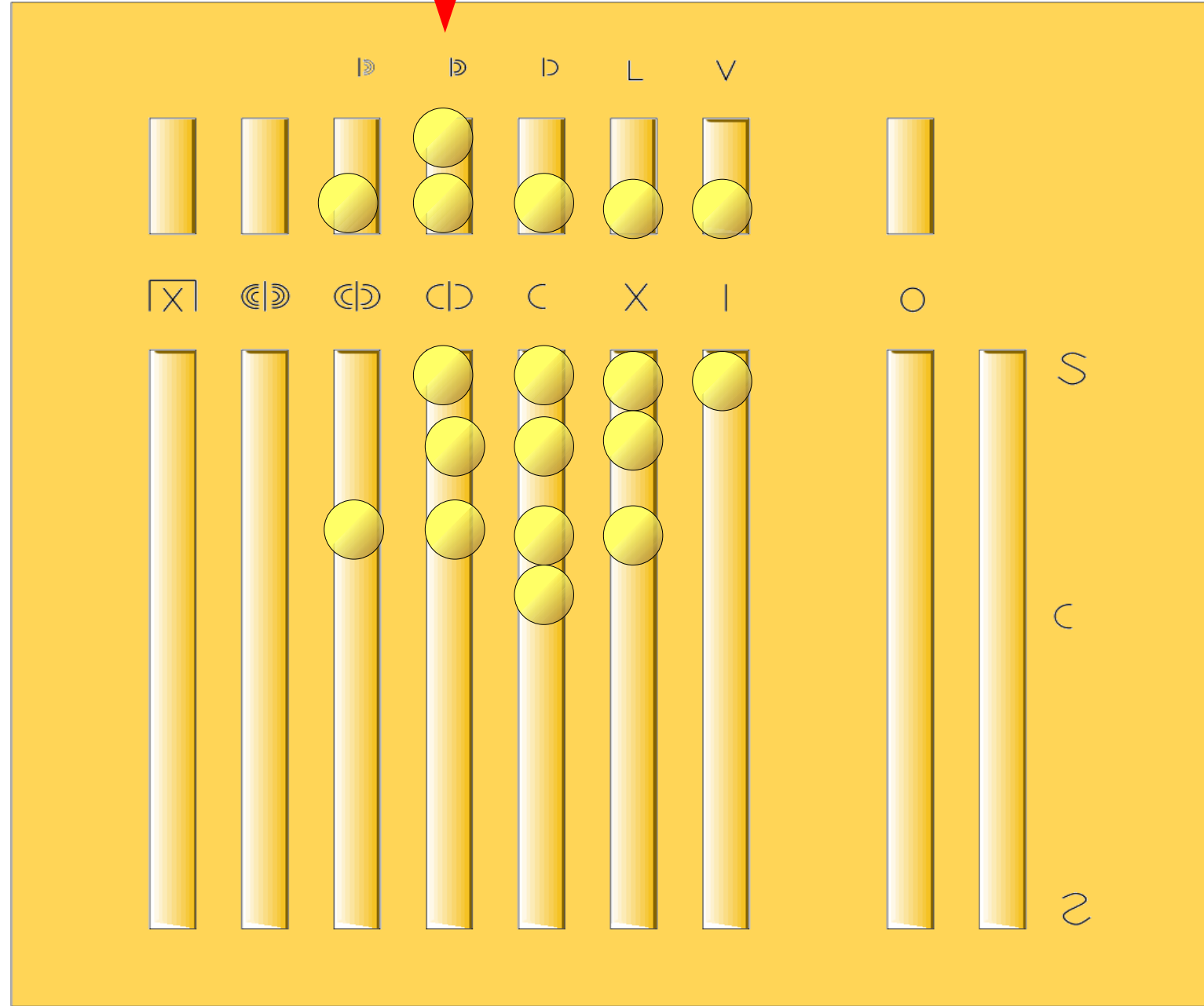
MCXXI

LXVI

MULTIPLICATIO



MULTIPLICATIO



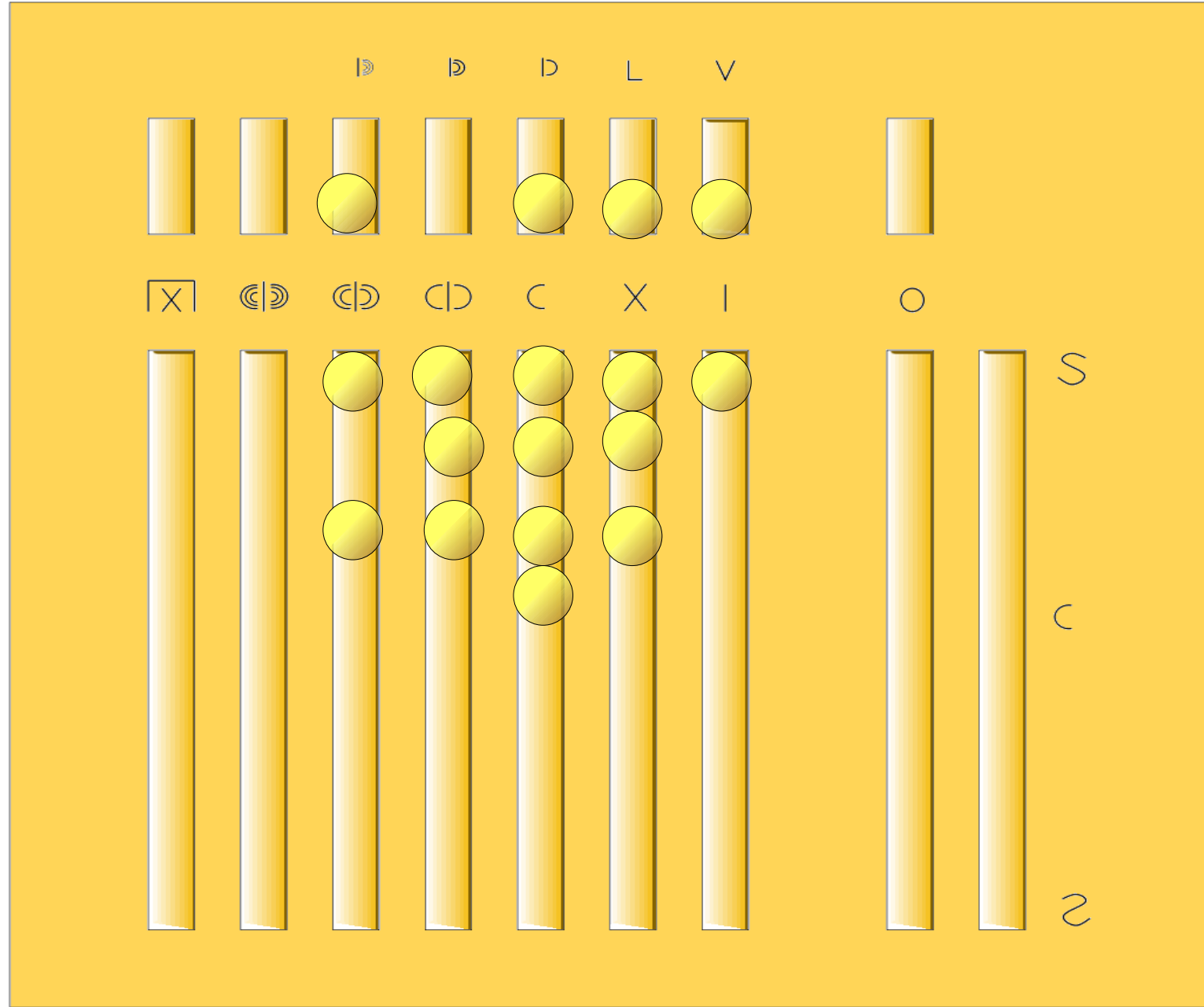
MCXXI

LXVI

MULTIPLICATIO

MCXXI

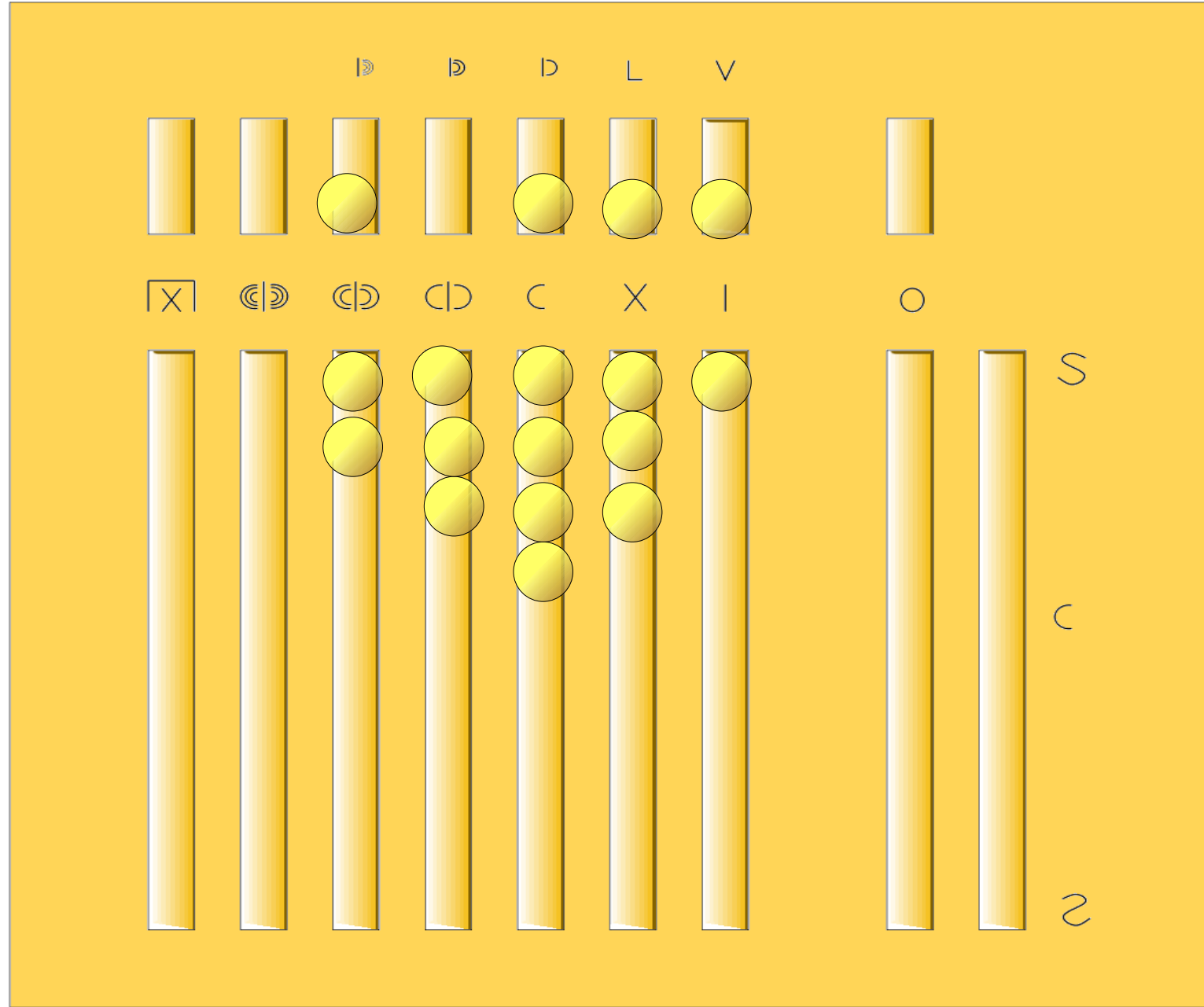
LXVI



MULTIPLICATIO

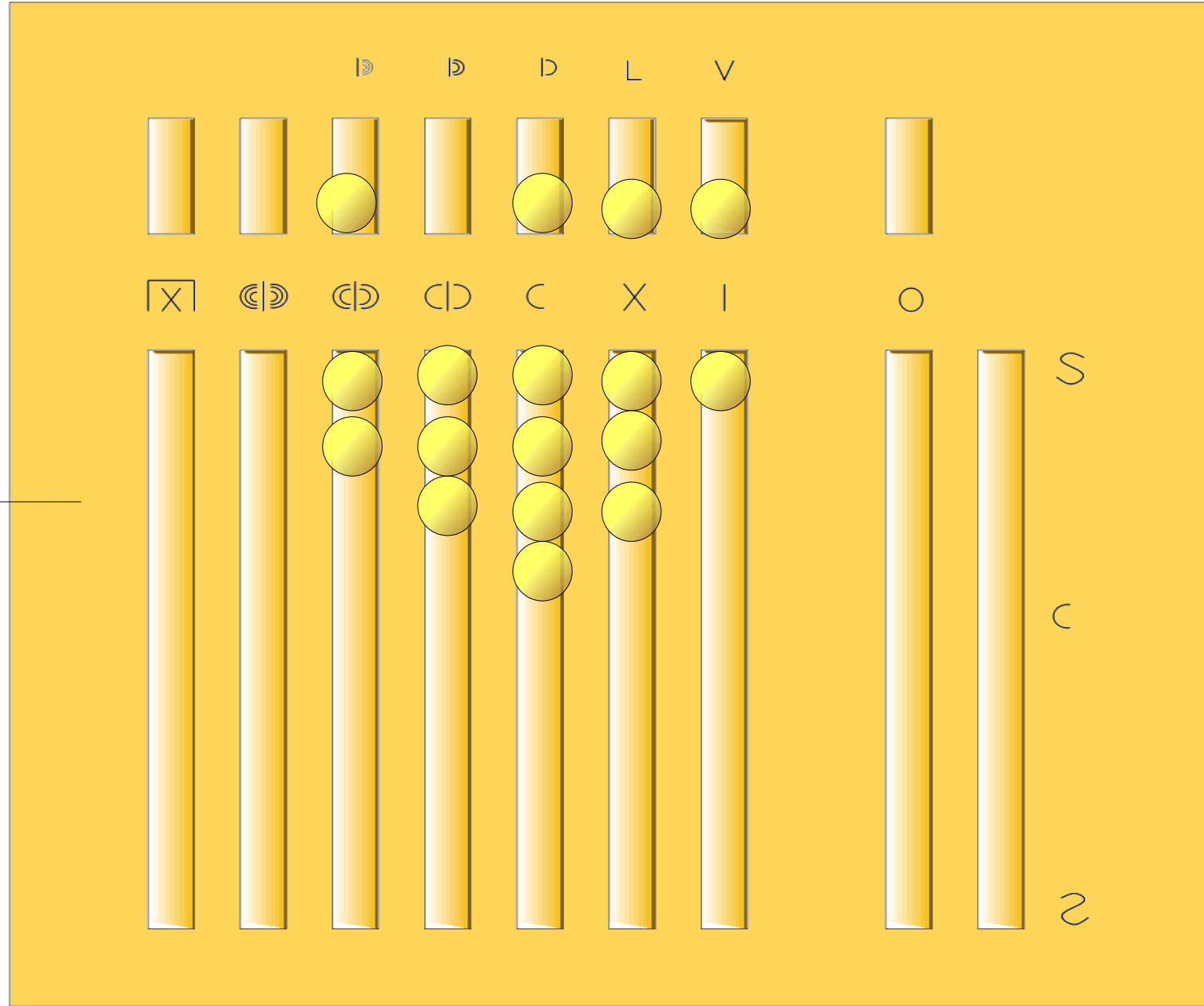
MCXXI

LXVI



MULTIPLICATIO

DDDD
MMM
DCCCC
LXXXI



MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
							X

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
\mathbb{O}	M	C	X	X

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
\mathbb{D}	M	C	X	X
				C

MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
⊗		M		C		X	X
⊗		⊗		M		C	C







MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
⊗		M		C		X	X
⊗		⊗		M		C	C
							M

MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
$\textcircled{\textcircled{\Phi}}$		M		C		X	X
$\textcircled{\textcircled{\textcircled{\Phi}}}$		$\textcircled{\textcircled{\Phi}}$		M		C	C
$\boxed{\text{M}}$		$\textcircled{\textcircled{\Phi}}$		$\textcircled{\textcircled{\Phi}}$		M	M

MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
							V
		M		C		X	X
				M		C	C
						M	M

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
D	D	L	V	V
Ⓞ	M	C	X	X
ⓄⓄ	Ⓞ	M	C	C
Ⓜ	ⓄⓄ	Ⓞ	M	M

MULTIPLICATIO

M		C		X		I	
M		C		X		I	I
D		D		L		V	V
Ⓞ		M		C		X	X
							L
Ⓞ		Ⓞ		M		C	C
Ⓜ		Ⓞ		Ⓞ		M	M

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
D	D	L	V	V
Ⓞ	M	C	X	X
D	D	D	L	L
Ⓞ	Ⓞ	M	C	C
Ⓜ	Ⓞ	Ⓞ	M	M

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
D	D	L	V	V
Ⓞ	M	C	X	X
D	D	D	L	L
Ⓞ	Ⓞ	M	C	C
				D
Ⓜ	Ⓞ	Ⓞ	M	M

MULTIPLICATIO

M	C	X	I	
M	C	X	I	I
D	D	L	V	V
Ⓞ	M	C	X	X
D	D	D	L	L
Ⓞ	Ⓞ	M	C	C
D	D	D	D	D
M	Ⓞ	Ⓞ	M	M

MULTIPLICATIO

M	C	X	V	I	
M	C	X		I	I
D	D	L		V	V
Ⓞ	M	C		X	X
D	D	D		L	L
Ⓞ	Ⓞ	M		C	C
D	D	D		D	D
Ⓜ	Ⓞ	Ⓞ		M	M

MULTIPLICATIO

M	D	C	L	X	V	I	
M		C		X	V	I	I
D		D		L	XXV	V	V
CC		M		C	L	X	X
DD		D		D	CCL	L	L
CCC		CC		M	D	C	C
<u>D</u>		D		D	MMD	D	D
M		CCC		CC	D	M	M

MULTIPLICATIO

M	D	C	L	X	V	I	
M	D	C	L	X	V	I	I
D	MMD	D	CCL	L	XXV	V	V
CD	D	M	D	C	L	X	X
D	CD D	D	MMD	D	CCL	L	L
CD	D	CD	D	M	D	C	C
D	CD CD D	D	CD CD D	D	MMD	D	D
MD	D	CD	D	CD	D	M	M

MULTIPLICATIO

M

C

X

X

I

X

V

I

MULTIPLICARE

MCXXI

XVI



MULTIPLICATIO

	M	C	X	X	I	
	Ⓜ	M	C	C	X	X
	Ⓓ	D	L	L	V	V
	M	C	X	X	I	I

MULTIPLICARE

MCXXI

XVI



MULTIPLICATIO

	M	C	X	X	I	
	Ⓒ	M	C	C	X	X
	Ⓓ	D	L	L	V	V
	M	C	X	X	I	I

MULTIPLICARE

MCXXI

XVI

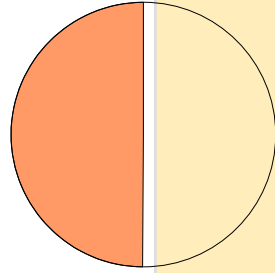
Ⓒ Ⓓ MMDCCCCLXXXVI

17986



FRAZIONI

S
Semis
(semisse)



metà

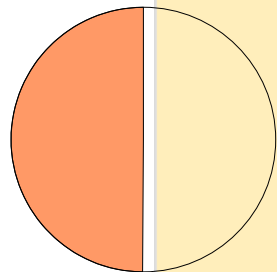
		D	D	D	L	V		
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S



FRAZIONI

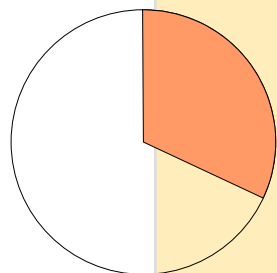
S

Semis
(semisse)



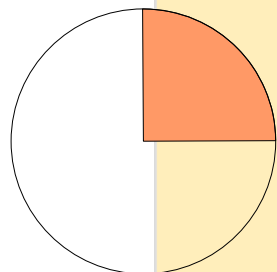
metà

Triens
(triente)

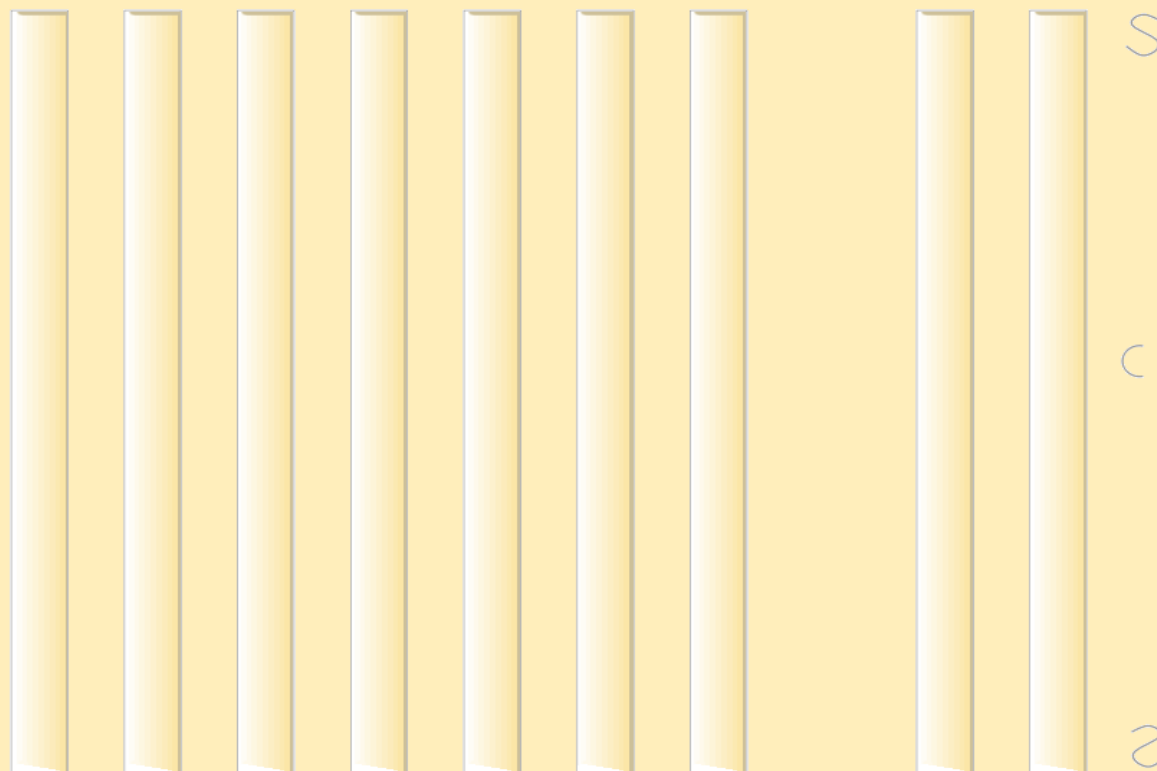
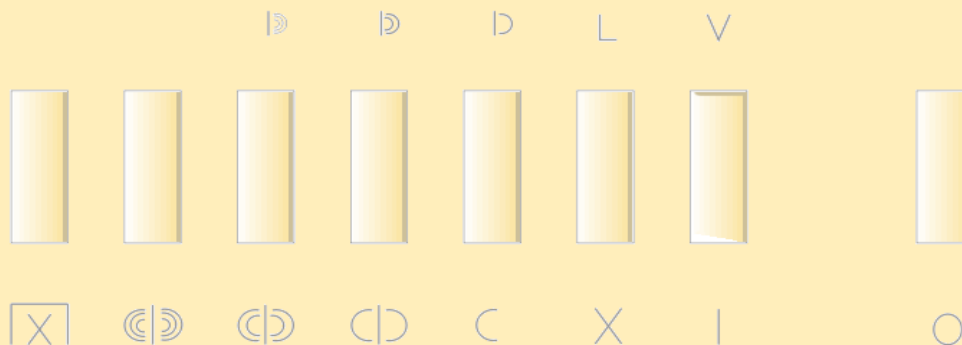


un terzo

Quadrans
(quadrante)



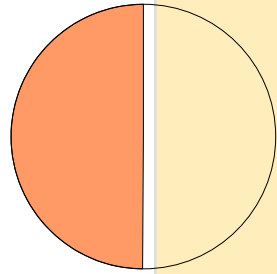
un quarto



FRAZIONI

S

Semis
(semisse)



metà

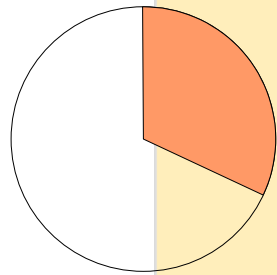


D D D L V

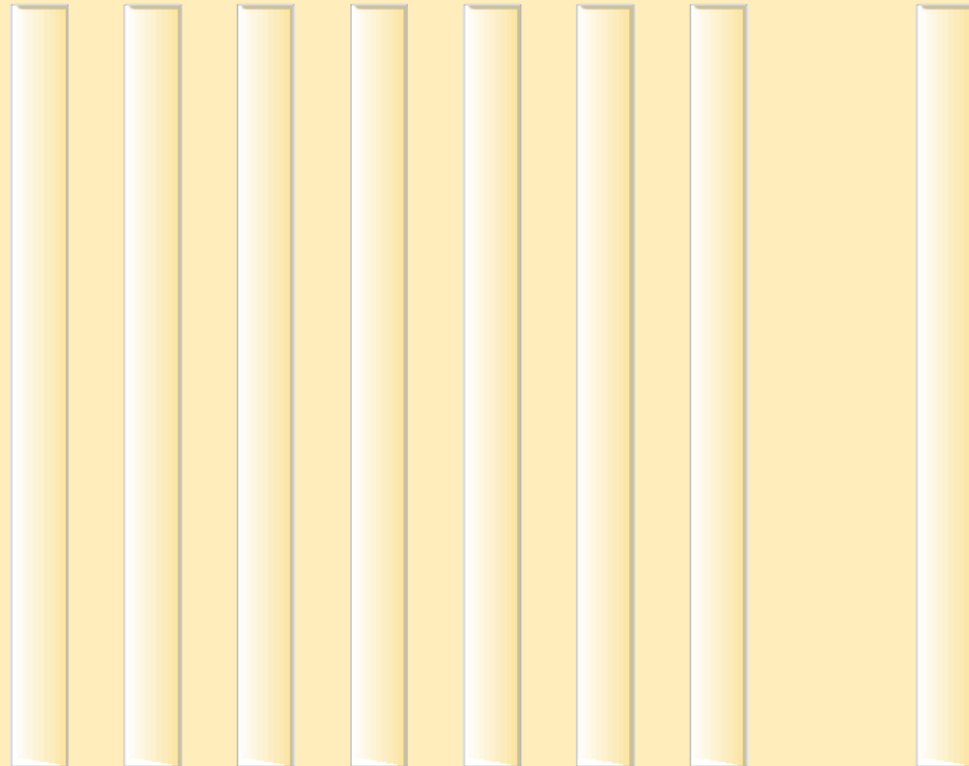


...

Triens
(triente)



un terzo

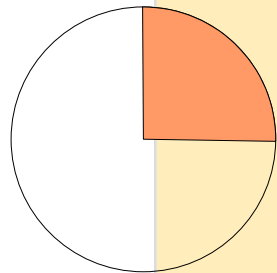


S

C

...

Quadrans
(quadrante)



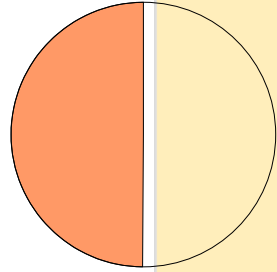
un quarto

2

FRAZIONI

S

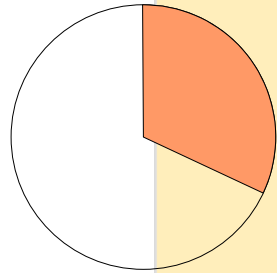
Semis
(semisse)



metà

....

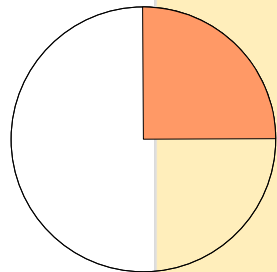
Triens
(triente)



un terzo

...

Quadrans
(quadrante)



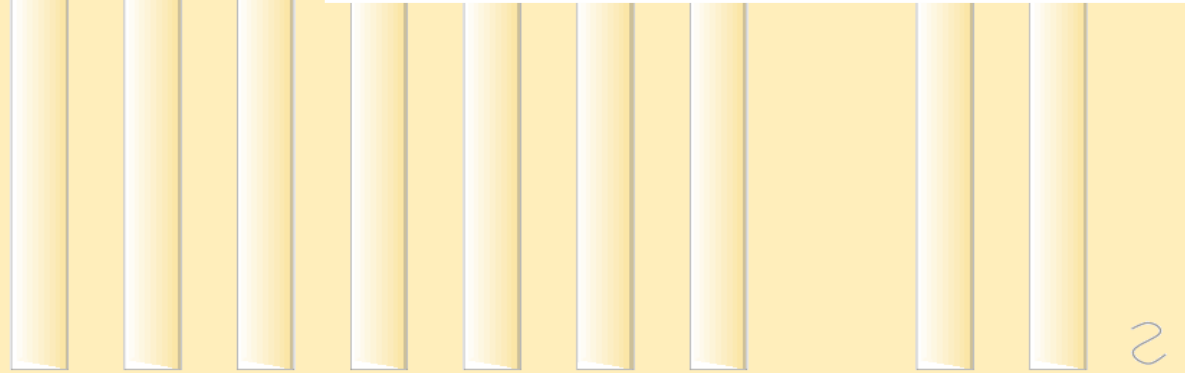
un quarto



•
**Uncia
(uncia)**

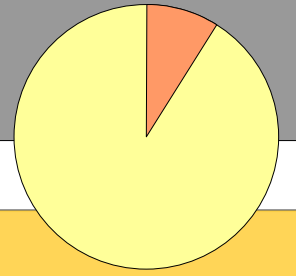
A circular pie chart divided into twelve equal sectors. One sector is shaded orange, representing the fraction 1/12.

Un dodicesimo



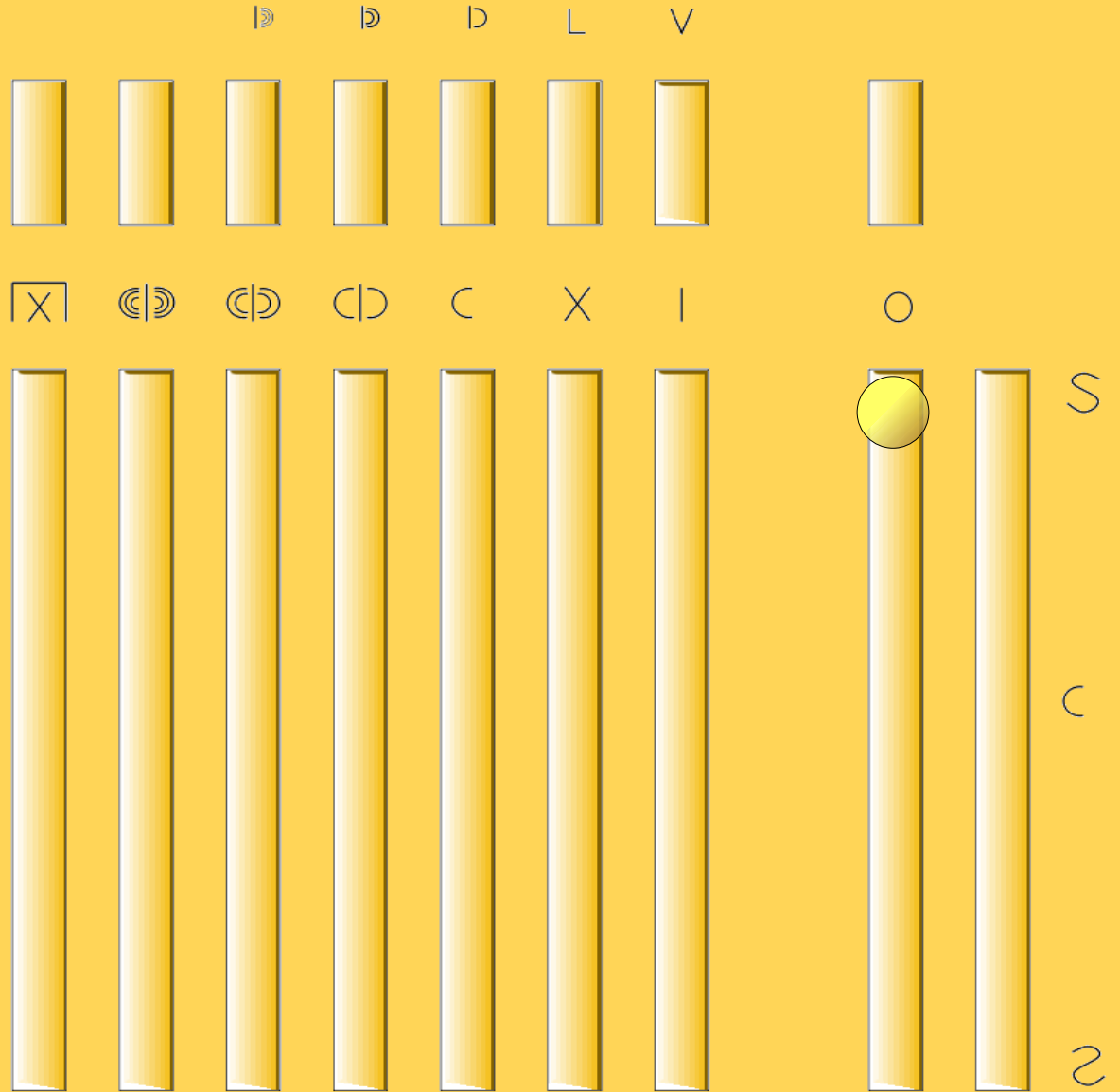
2

FRAZIONI

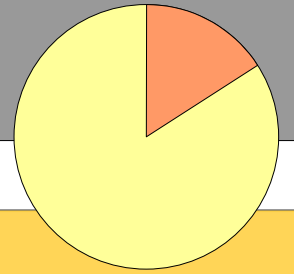


•
Uncia (uncia)

Un dodicesimo

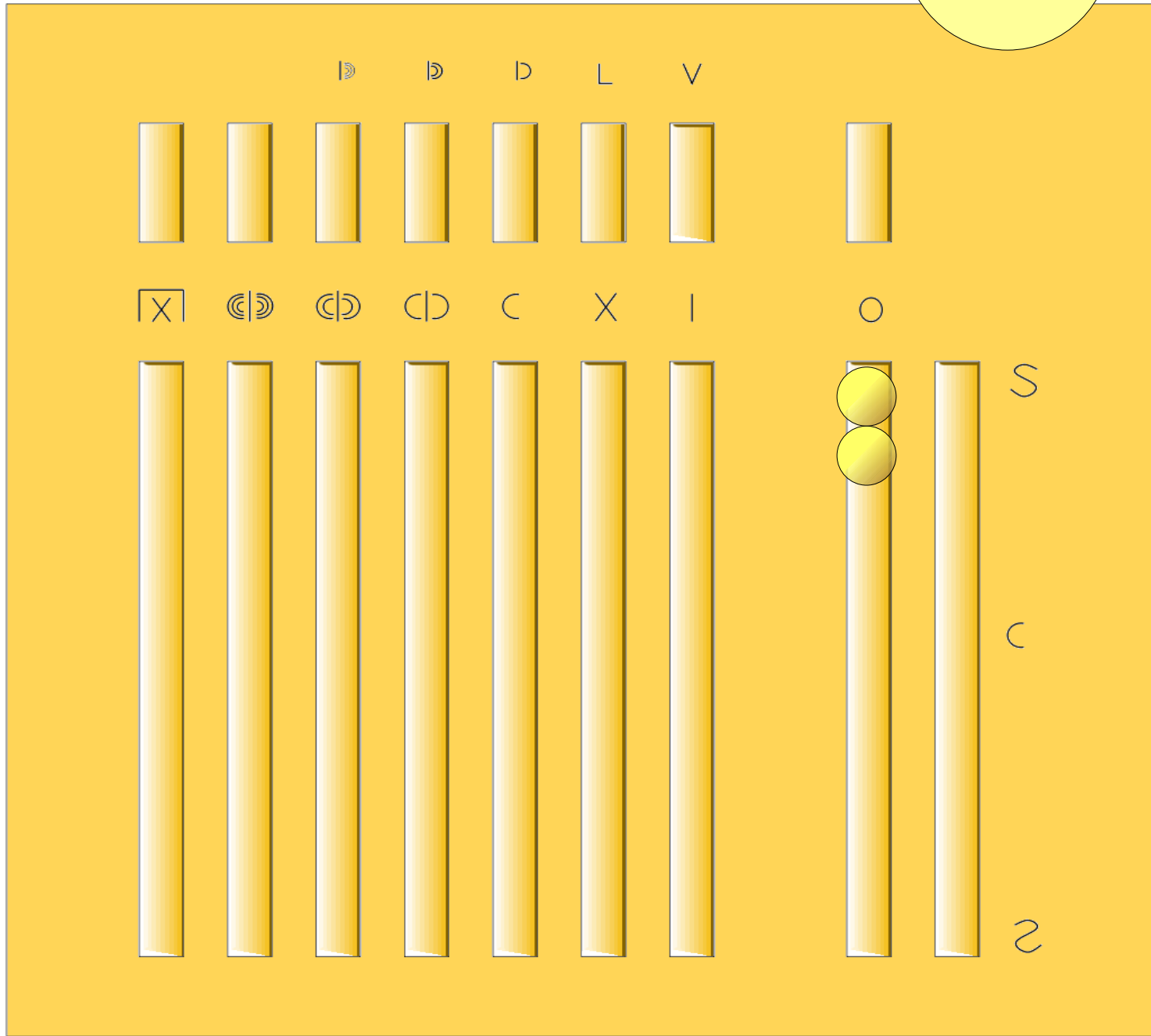


FRAZIONI

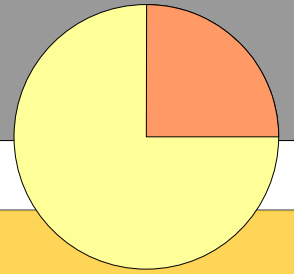


•
Uncia (uncia)
Un dodicesimo

••
Sextans (sestante)
Un sesto
sei sestanti = uno



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

••
Sextans (sestante)

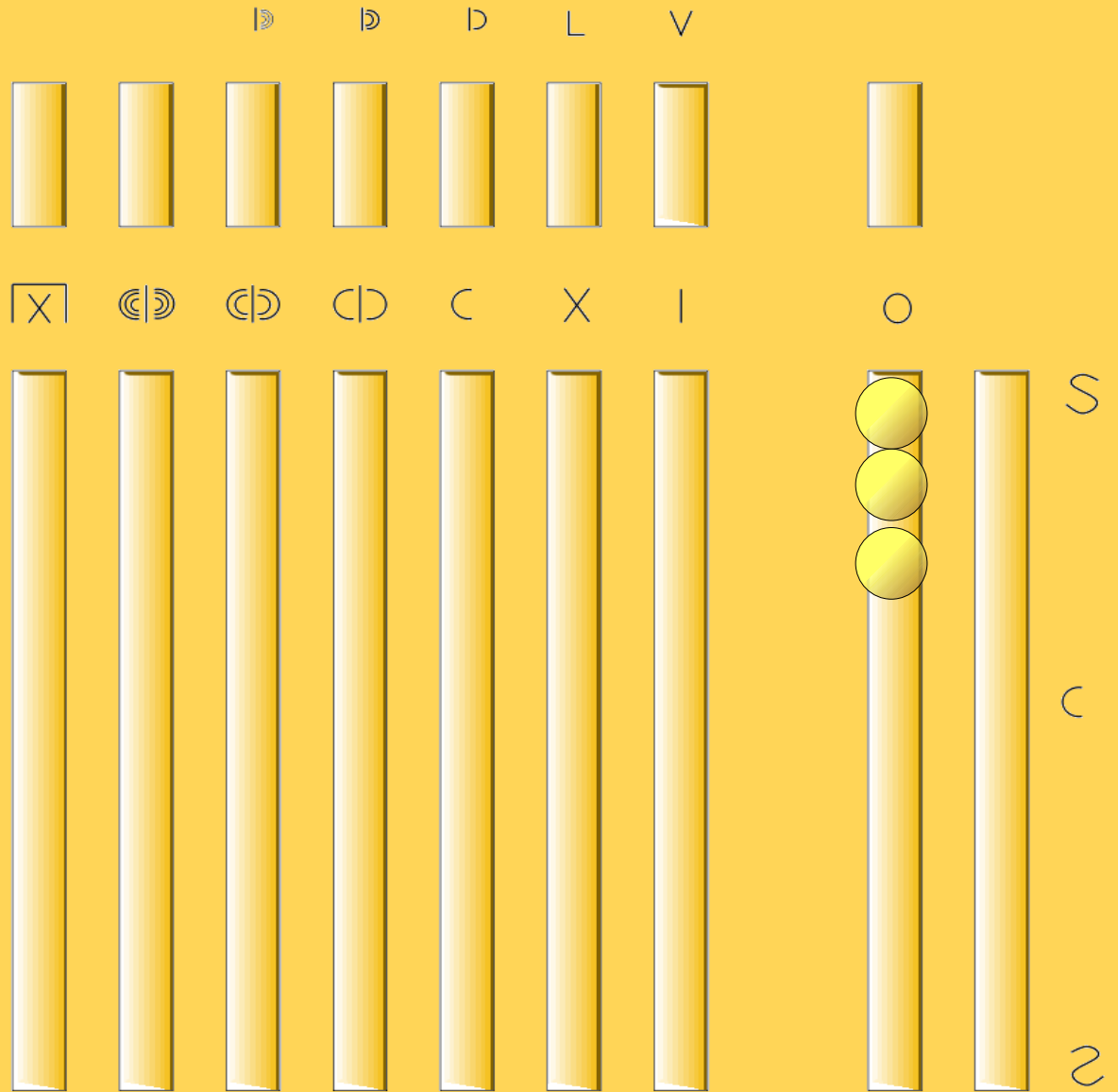
Un sesto

sei sestanti = uno

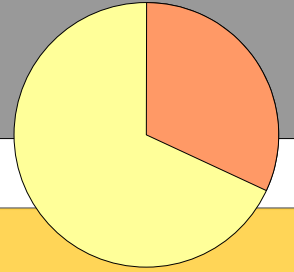
•••
Quadrans (quadrante)

Un quarto

quattro quadranti = uno



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

••
Sextans (sestante)

Un sesto

sei sestanti = uno

•••
Quadrans (quadrante)

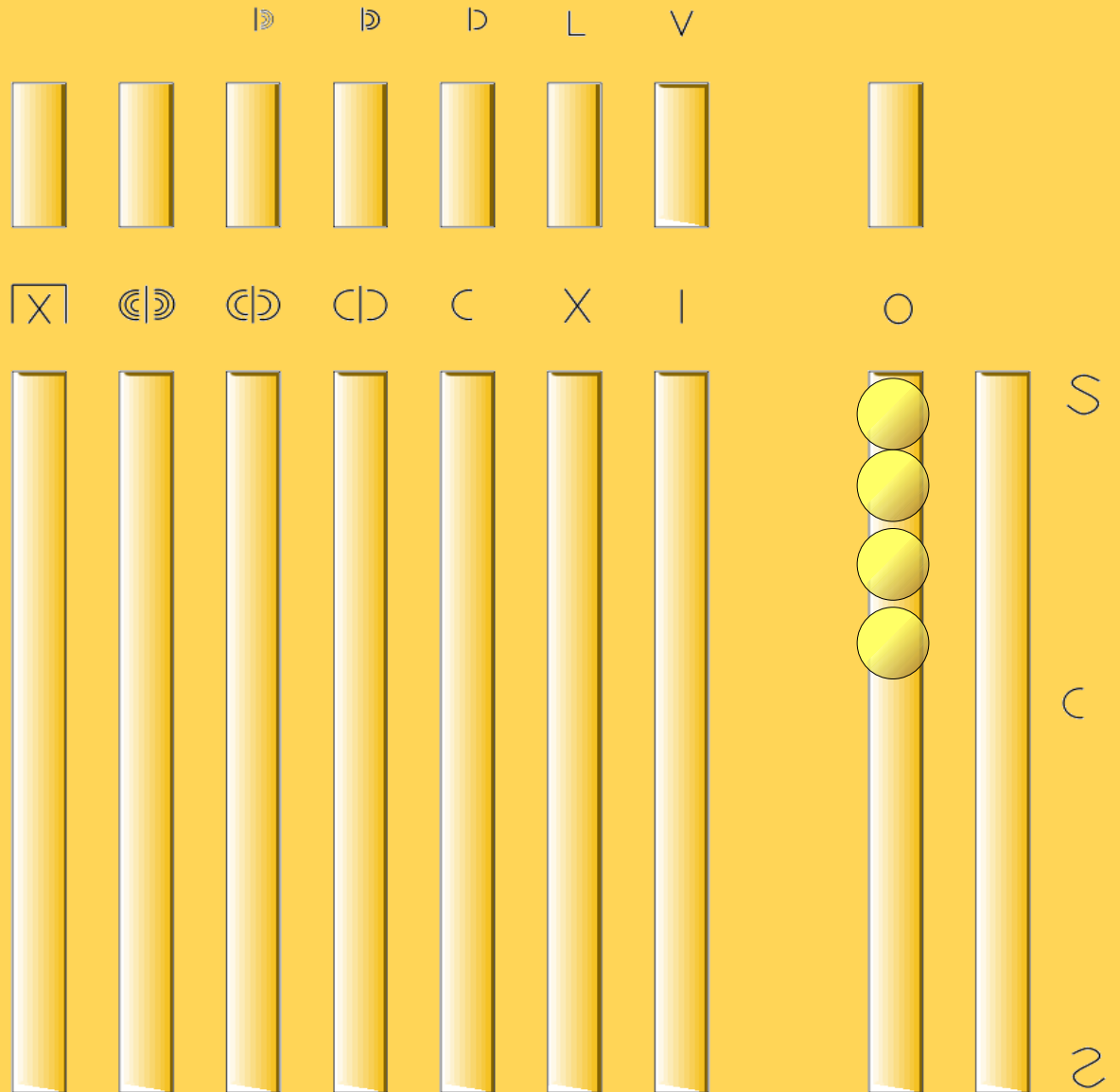
Un quarto

quattro quadranti = uno

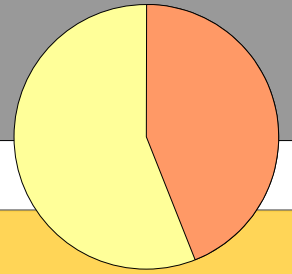
••••
Triens (triente)

Un terzo

tre trientii = uno



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

••
Sextans (sestante)

Un sesto

sei sestanti = uno

•••
Quadrans (quadrante)

Un quarto

quattro quadranti = uno

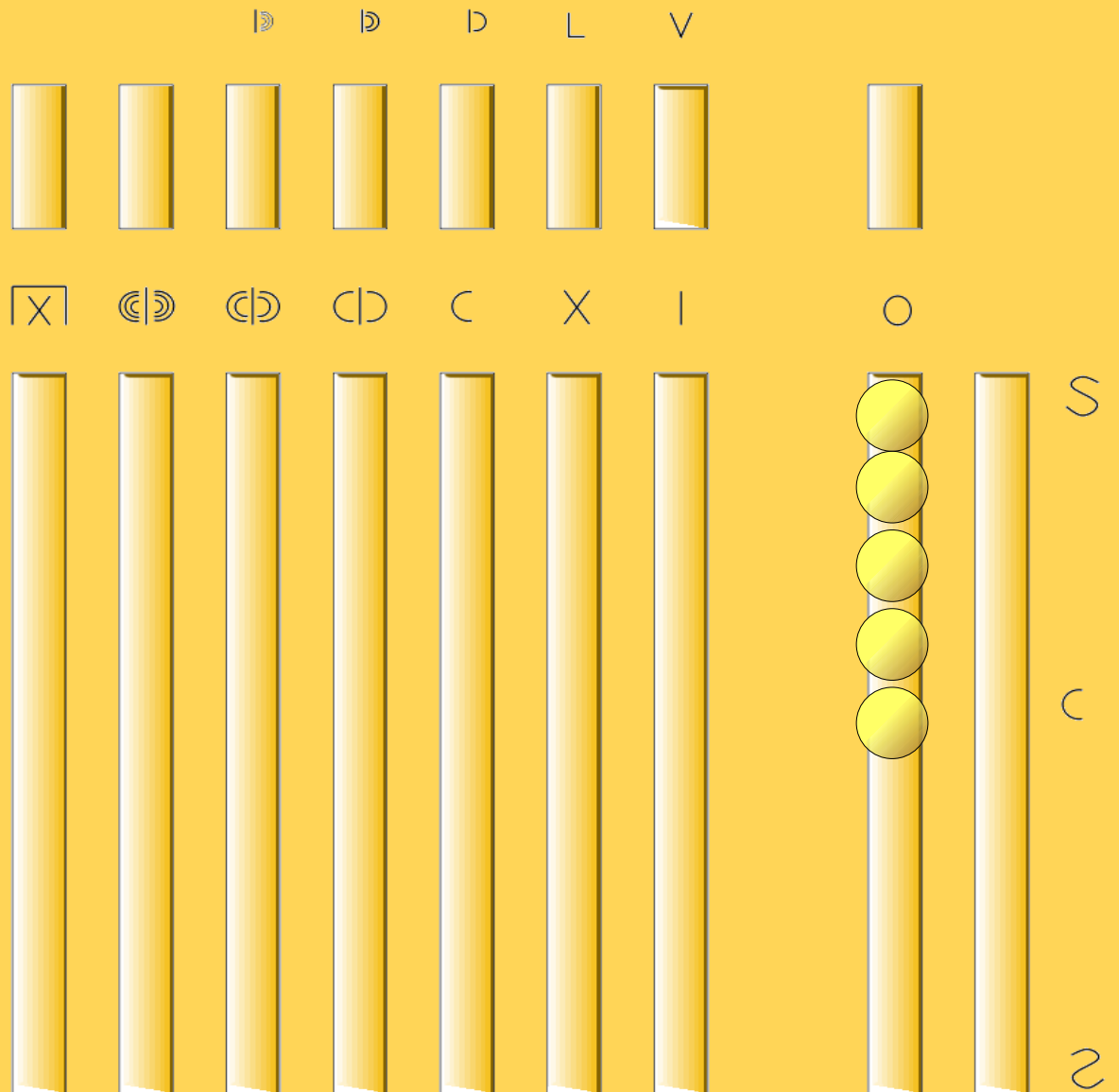
••••
Triens (triente)

Un terzo

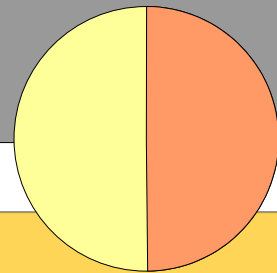
tre trientii = uno

•••••
Cinque once

Cinque dodicesimi



FRAZIONI



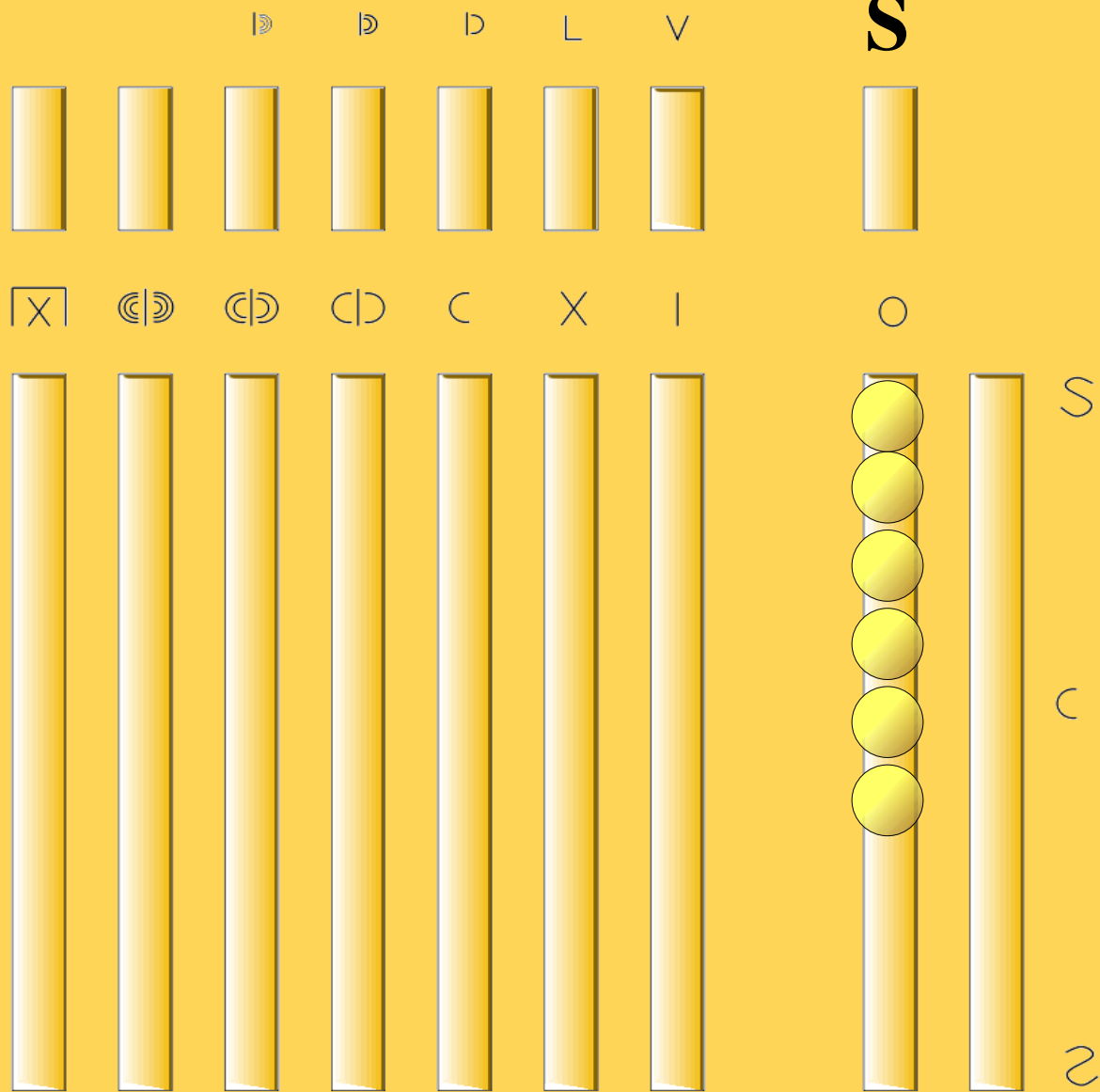
•
Uncia (uncia)

Un dodicesimo

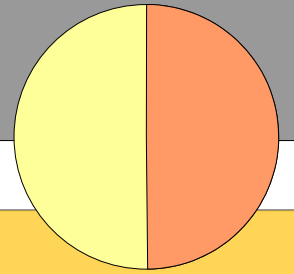
S ::::
Semis (semissi)

Un mezzo

due semissi = uno



FRAZIONI



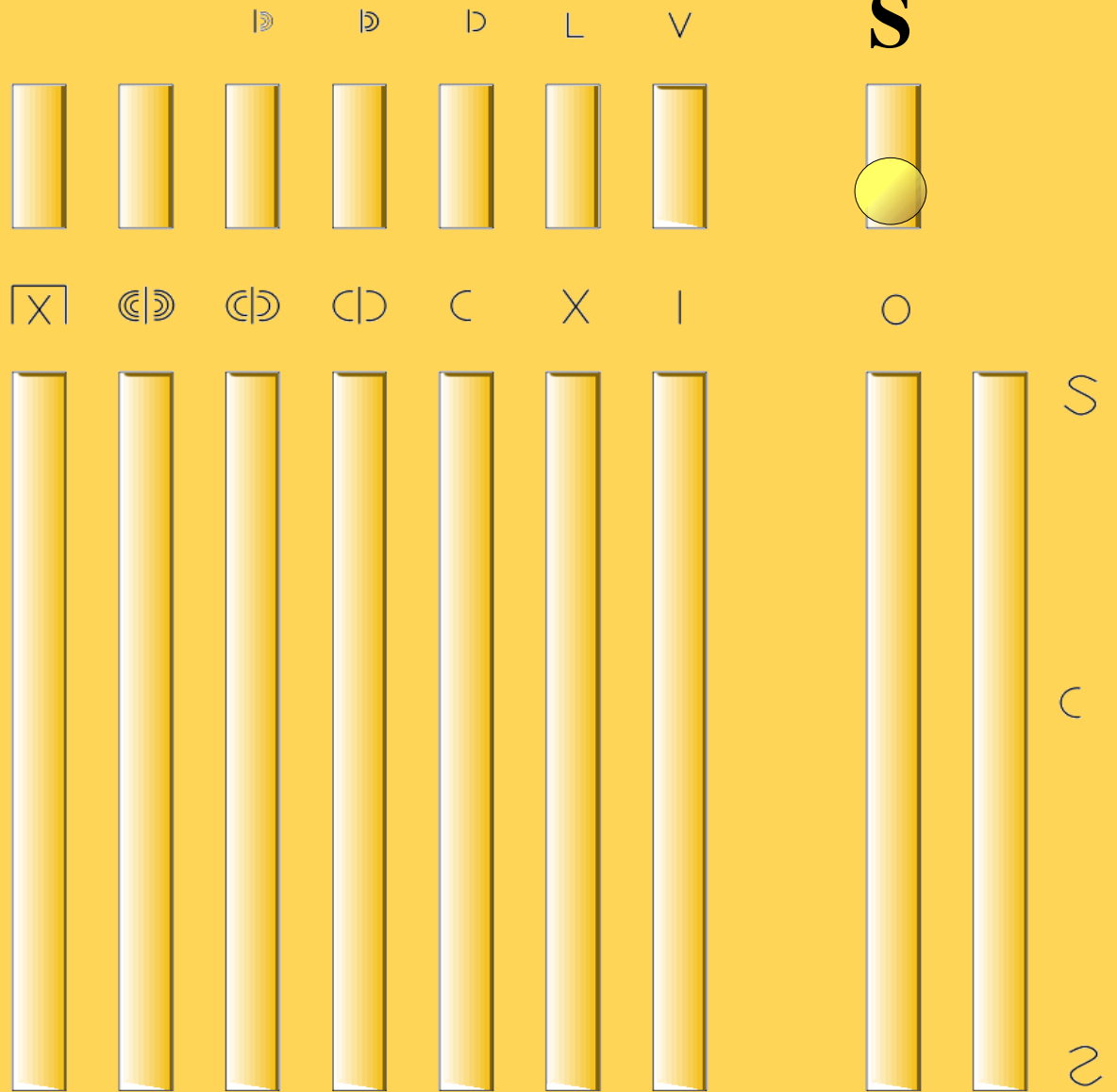
•
Uncia (uncia)

Un dodicesimo

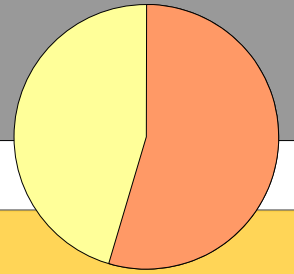
S ::::
Semis (semissi)

Un mezzo

due semissi = uno



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

S ::::
Semis (semissi)

Un mezzo

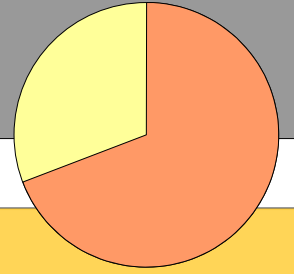
due semissi = uno

S.
Sette once

Sette dodicesimi

The diagram shows a grid of 14 vertical bars on a yellow background. Above the bars are the following symbols from left to right: 'D', 'D', 'D', 'L', 'V', 'S', 'X', 'C', 'I', 'O', 'S', 'C', '2'. The bars are arranged in two rows of seven. The first row has seven short bars, and the second row has seven tall bars. A yellow circle is placed on the bar labeled 'S' in the second row. The bar labeled 'S' in the first row is also marked with a yellow circle.

FRAZIONI



•
Uncia (uncia)

Un dodicesimo

S ∴
Semis (semissi)

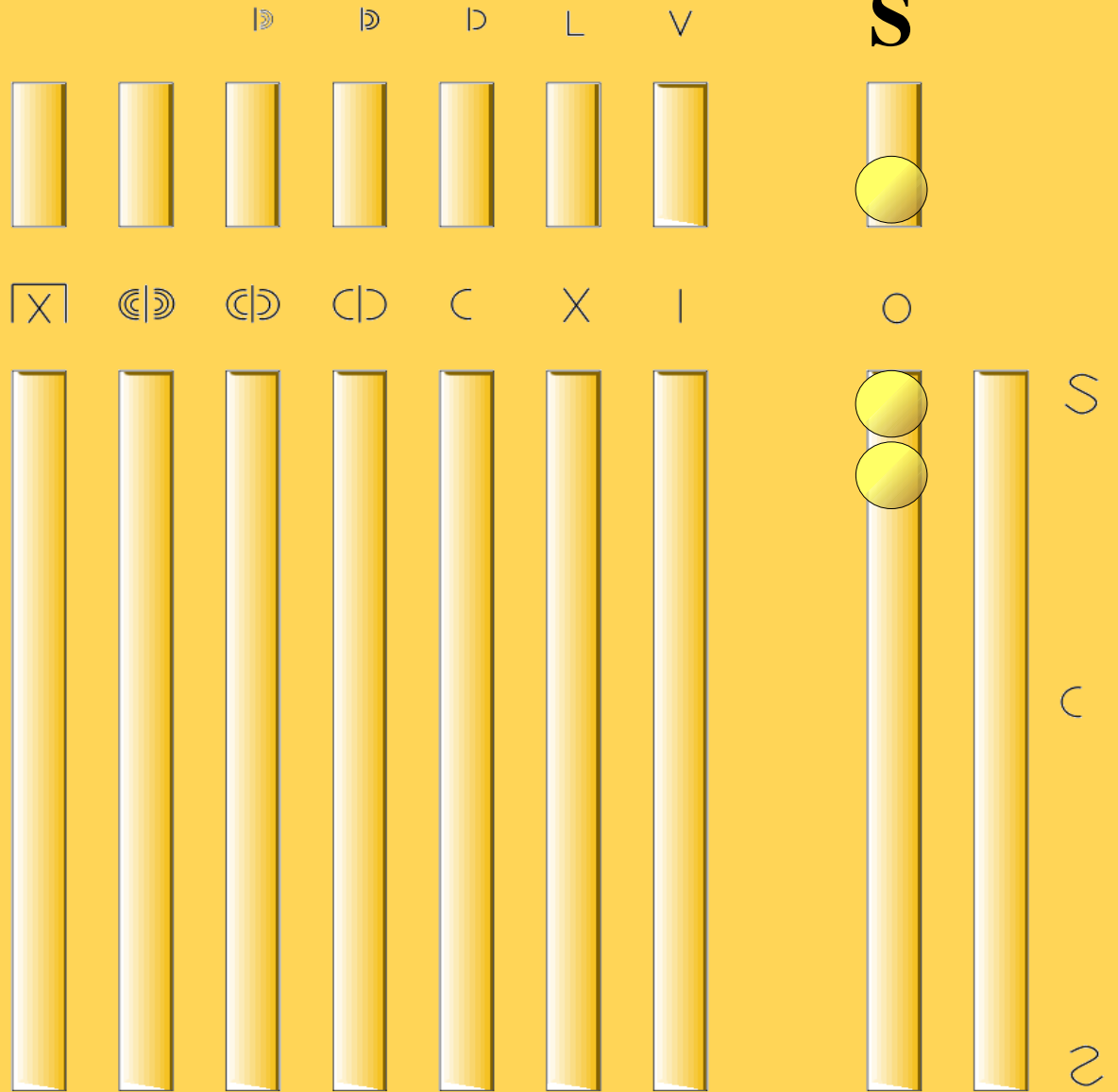
Un mezzo
due semissi = uno

S .
Sette once

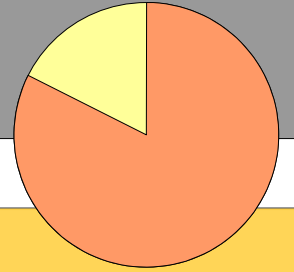
Sette dodicesimi

S ..
“Due parti”

Otto dodicesimi



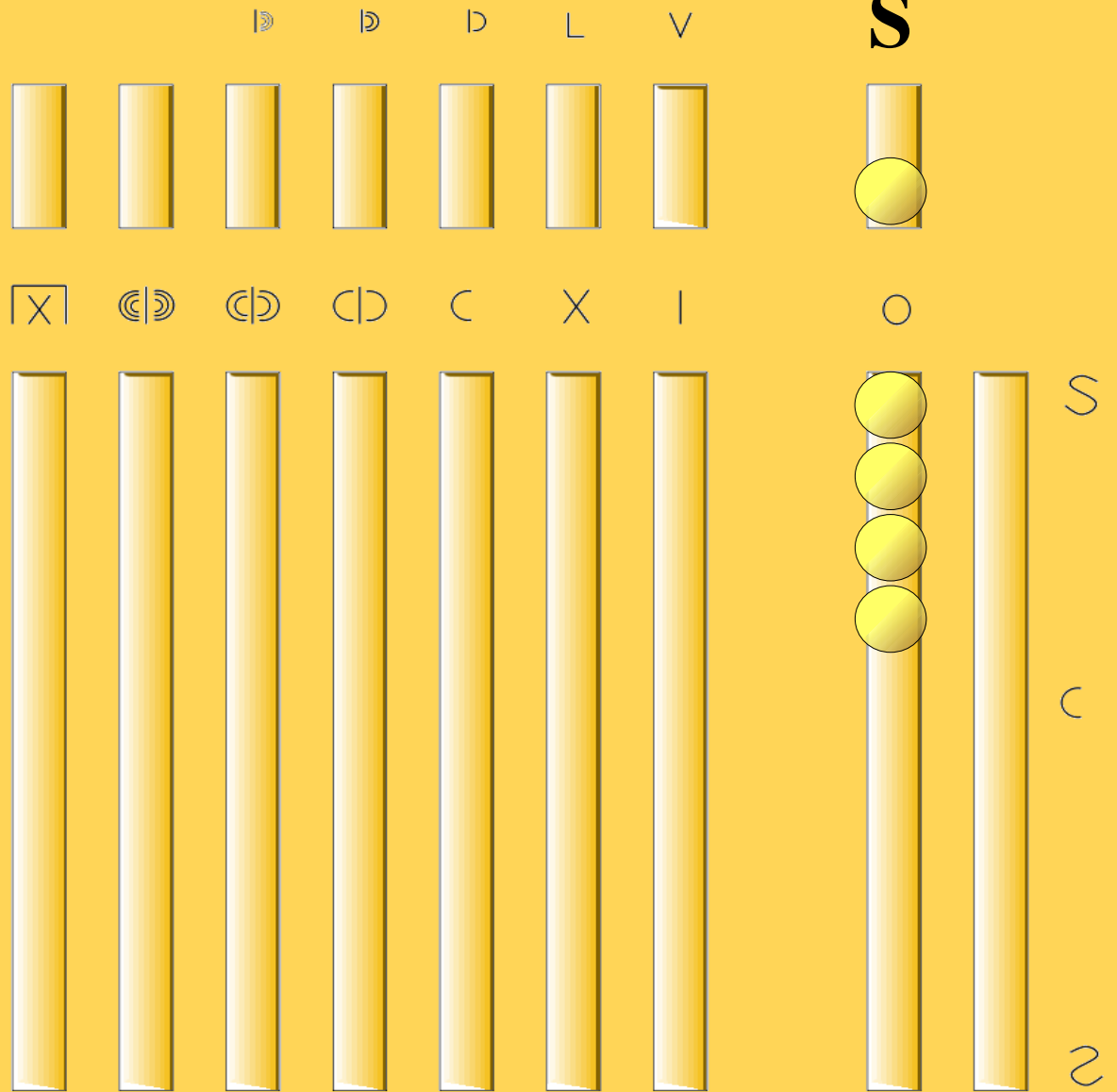
FRAZIONI



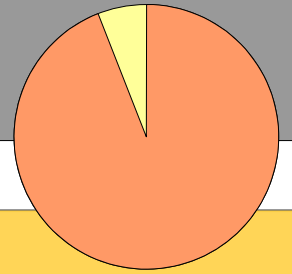
•
Uncia (uncia)
Un dodicesimo

S ∴
Semis (semissi)
Un mezzo
due semissi = uno

S
“Un sesto levato”
Dieci dodicesimi



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

S ∴
Semis (semissi)

Un mezzo

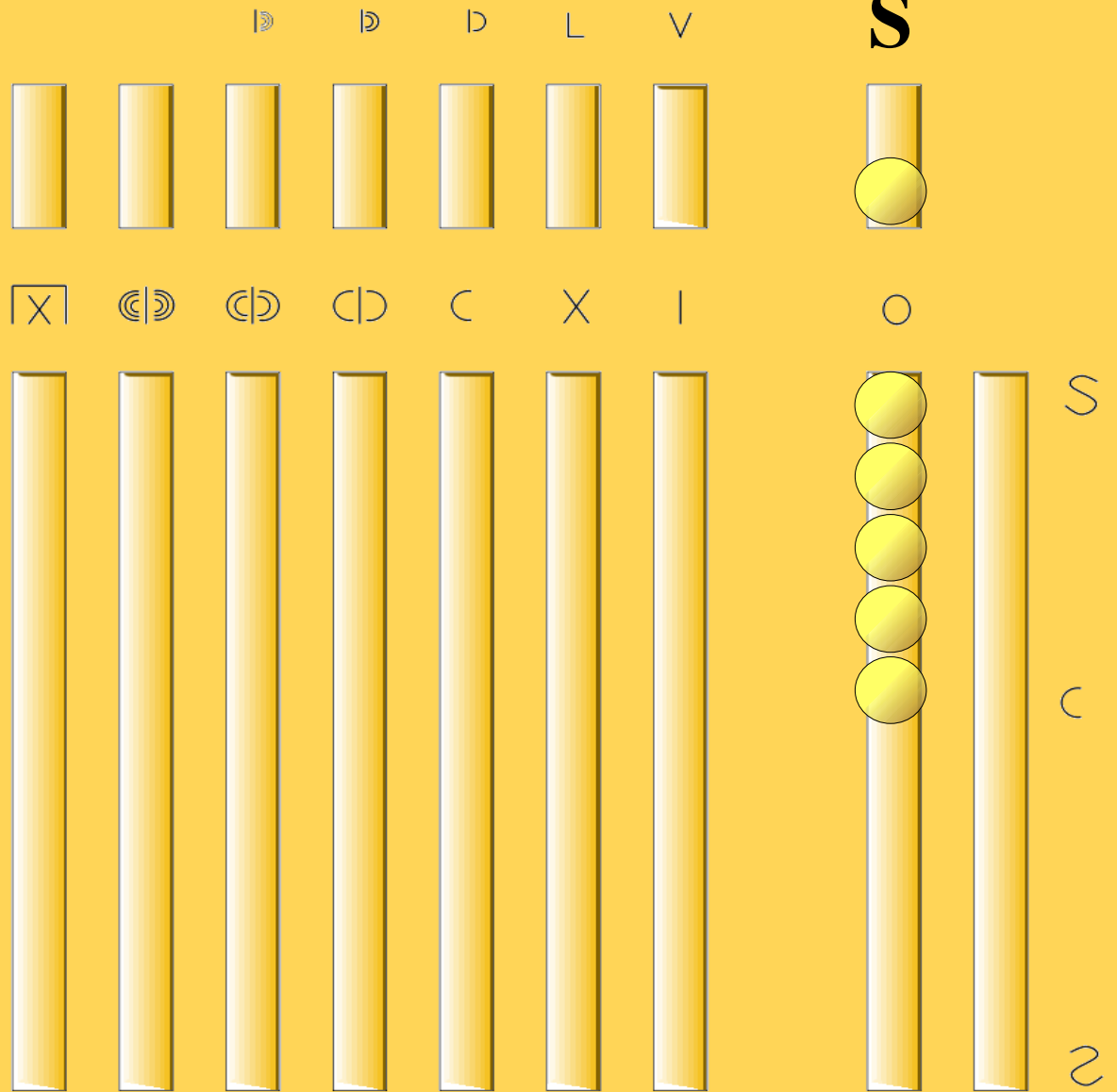
due semissi = uno

S
“Un sesto levato”

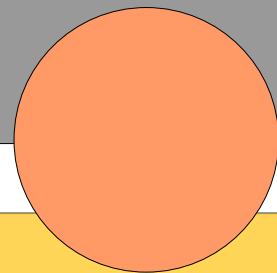
Dieci dodicesimi

S
“Un dodicesimo levato”

Undici dodicesimi



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

S ∴
Semis (semissi)

Un mezzo

due semissi = uno

S
“Un sesto levato”

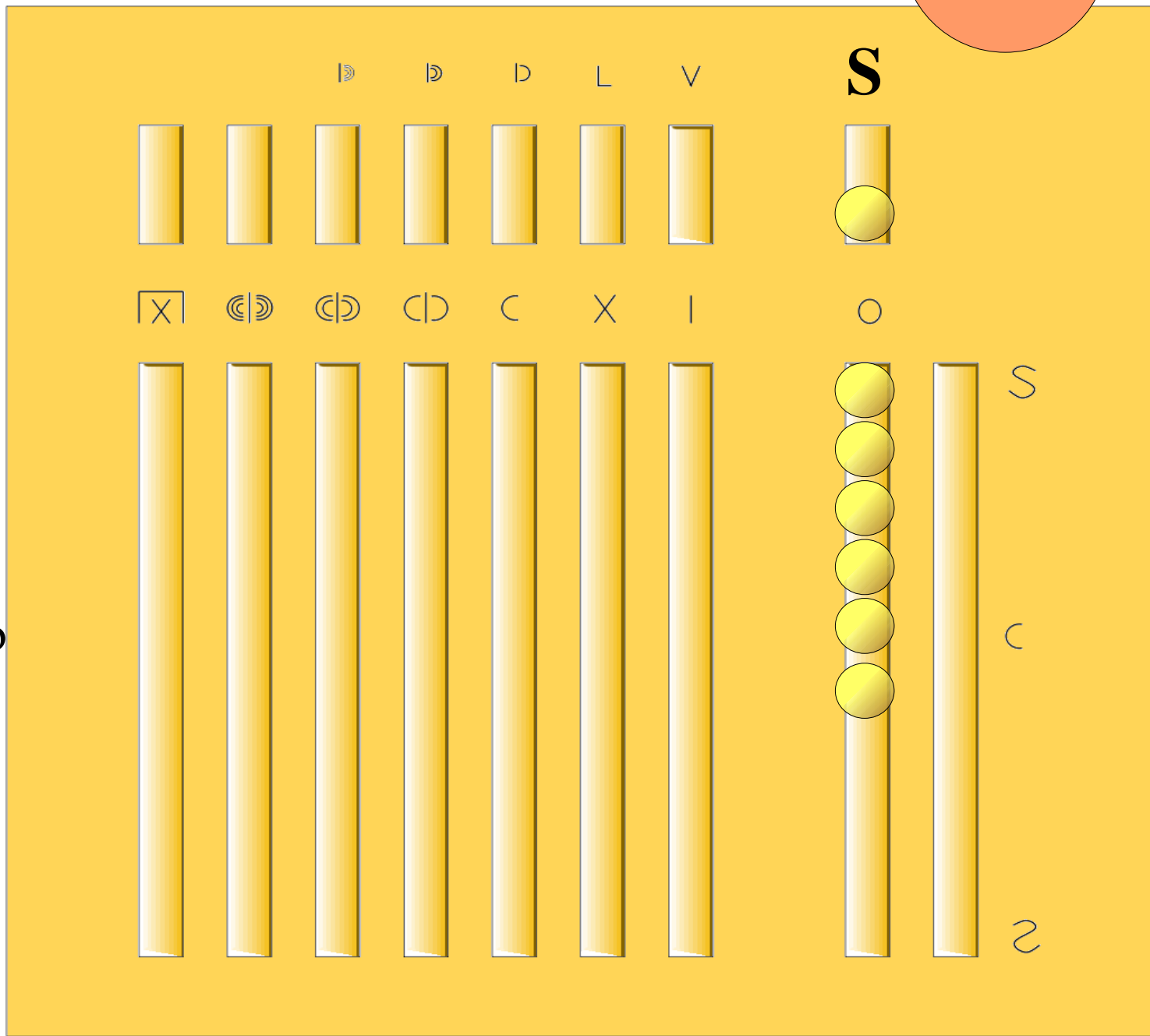
Dieci dodicesimi

S
“Un dodicesimo levato”

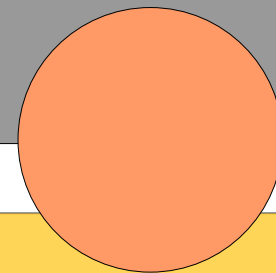
Undici dodicesimi

Ax (“Asse”)

Dodici dodicesimi



FRAZIONI



•
Uncia (uncia)

Un dodicesimo

S ∴
Semis (semissi)

Un mezzo

due semissi = uno

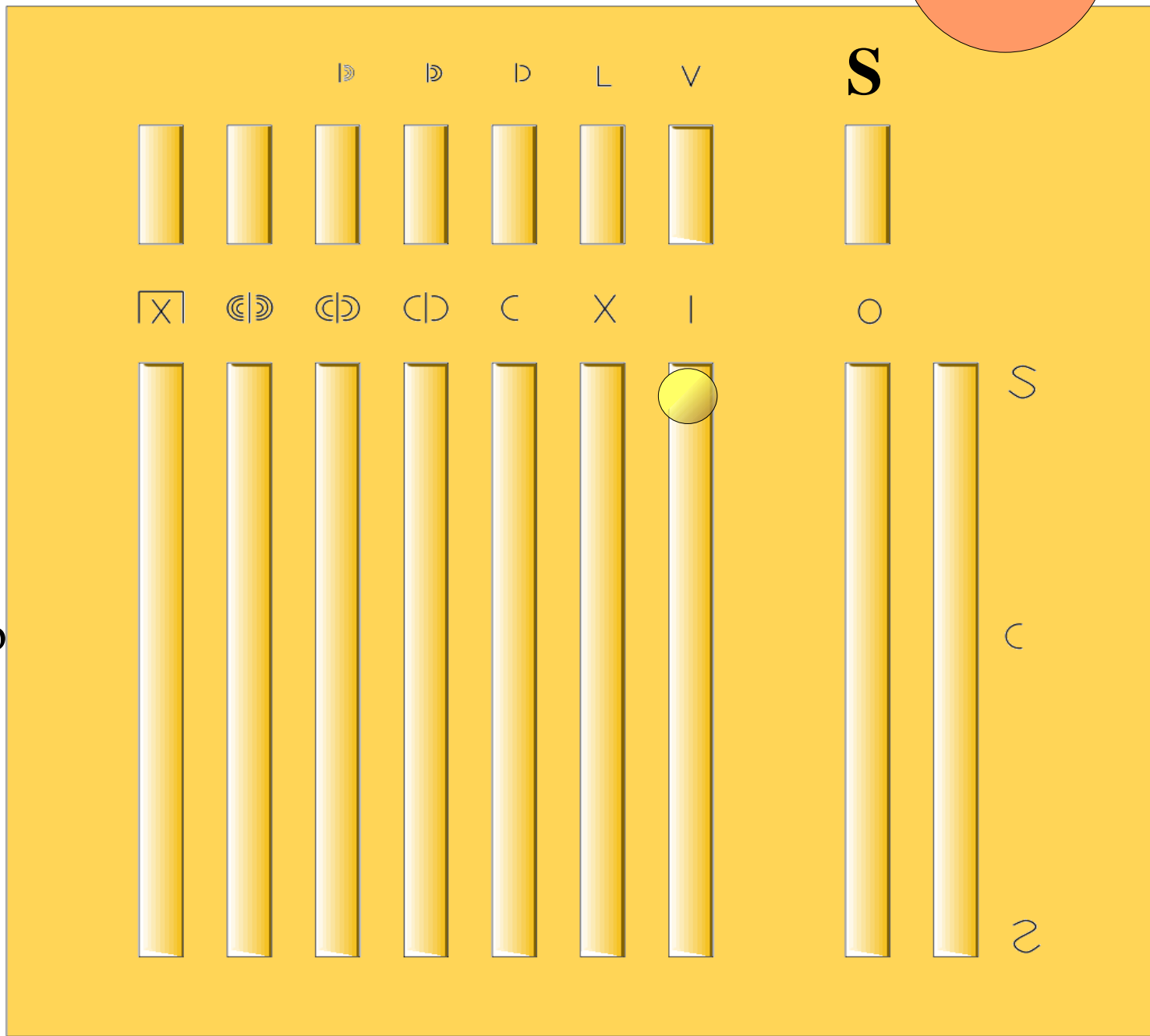
S
“Un sesto levato”

Dieci dodicesimi

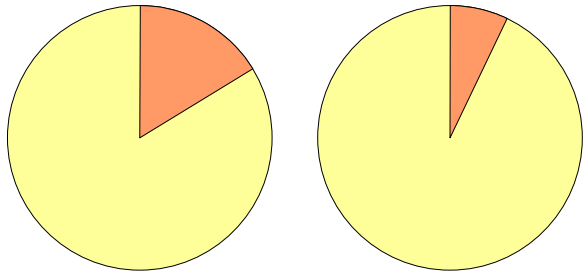
S
“Un dodicesimo levato”

Undici dodicesimi

I
As (‘‘Asse’’)
Dodici dodicesimi



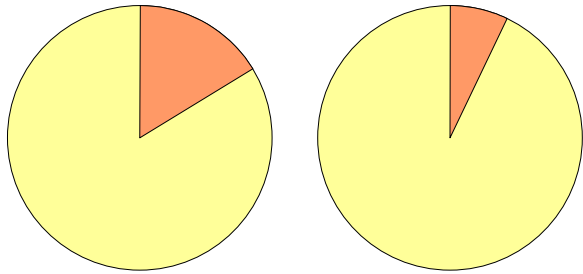
FRAZIONI



		D	D	D	L	V	S	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
X	C	C	C	C	X	I	O	
								S
								C
								S



FRAZIONI

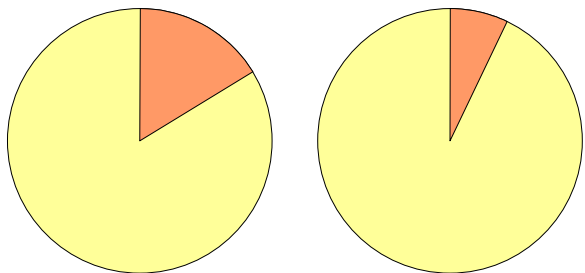


••

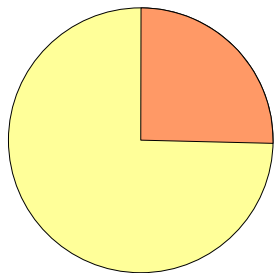
•

		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S

FRAZIONI



...

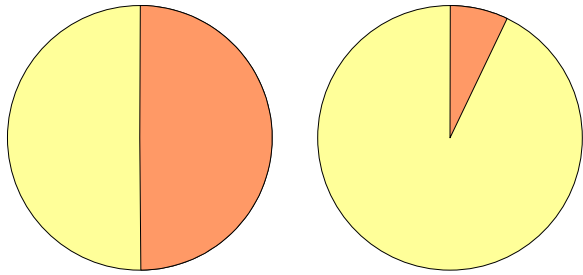


Un quarto



		D	D	D	L	V	S	
		⊂	⊂	⊂	⊂	X	I	O
							●	S
							●	C
							●	S
								2

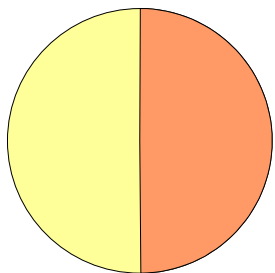
FRAZIONI



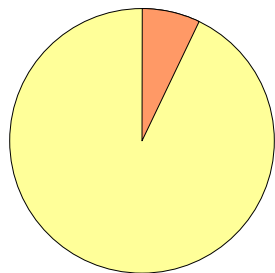
		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S



FRAZIONI



S



•

Interactive fraction tool interface on a yellow background.

Top row of controls: **S**, **D**, **D**, **D**, **L**, **V**, **S**

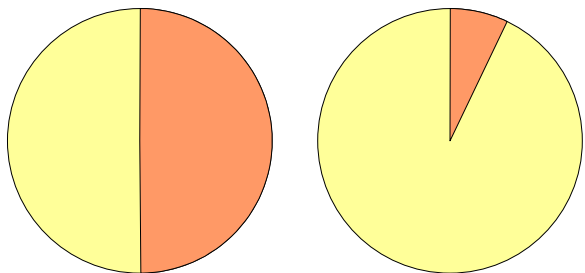
Second row: Seven vertical bars with a yellow circle at the top, and one vertical bar with a yellow circle at the top and the letter **O** to its right.

Third row: Seven square icons: a square with an 'X', a circle with a right-pointing arrow, a circle with a left-pointing arrow, a circle with a double arrow, a circle with a vertical line, a circle with an 'X', and a vertical line.

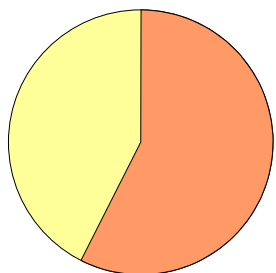
Bottom row: Seven vertical bars, followed by a vertical bar with a yellow circle at the top and the letter **S** to its right, and another vertical bar with the letter **C** to its right.

Bottom right corner: The number **2**.

FRAZIONI



S.

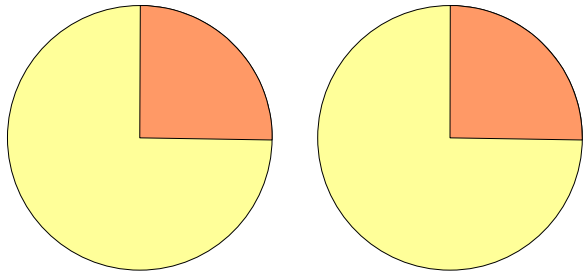


Sette once



Below the title, there is a large yellow rectangular area containing a grid of 14 vertical bars. Above the bars are various symbols: \mathbb{D} , \mathbb{D} , \mathbb{D} , L , V , S , $\square X$, \textcircled{C} , \textcircled{C} , \textcircled{C} , C , X , I , O . The bars are arranged in two rows of seven. The top row has a yellow circle on the eighth bar. The bottom row has a yellow circle on the eighth bar. To the right of the bottom row, there are three vertical bars with the letters S , C , and 2 next to them.

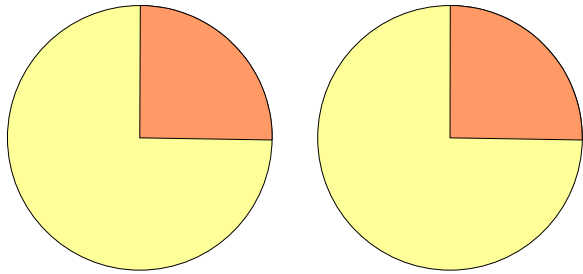
FRAZIONI



		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S



FRAZIONI

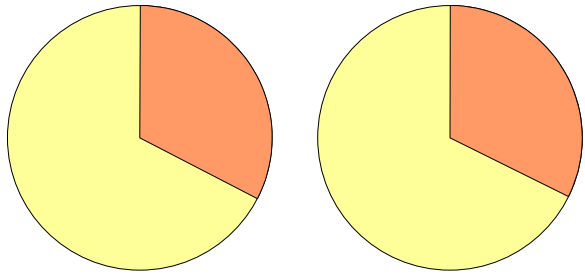


...

...

		D	D	D	L	V	S	
		⊂	⊂	⊂	⊂	X	I	O
							●	S
							●	
							●	
							●	C
							●	
							●	
								S

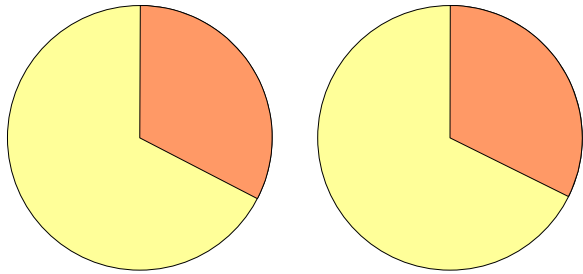
FRAZIONI



		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S



FRAZIONI

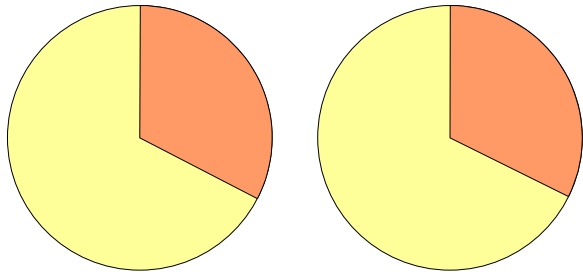


....

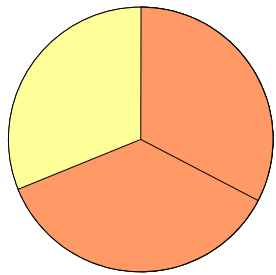
....

		D	D	D	L	V	S	
		⊂	⊂	⊂	⊂	X	I	O
							●●●●●●●	S
								C
								S

FRAZIONI



S..

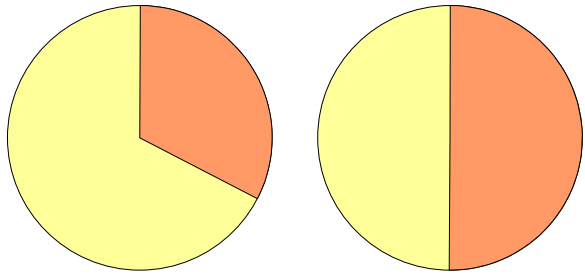


“Due parti”



		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S

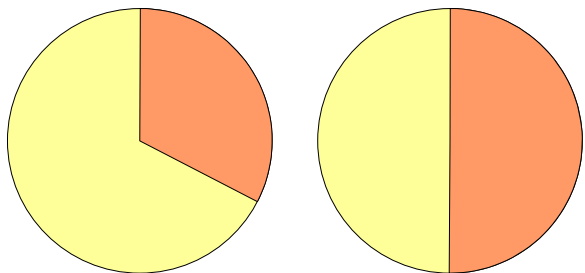
FRAZIONI



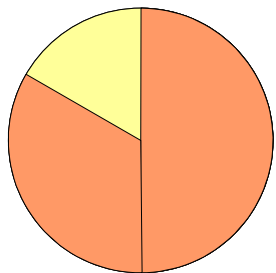
		D	D	D	L	V	S	
X	C	C	C	C	X	I	O	
								S
								C
								S



FRAZIONI



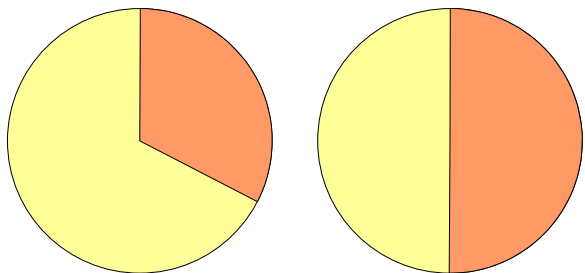
...



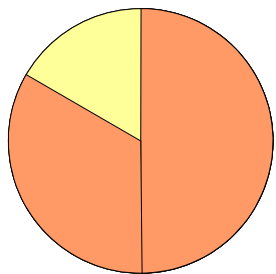
S

		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								S

FRAZIONI



S ...

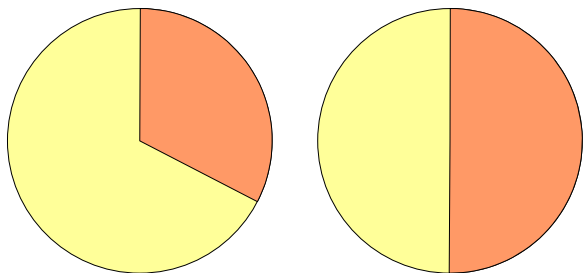


“Manca un sesto”

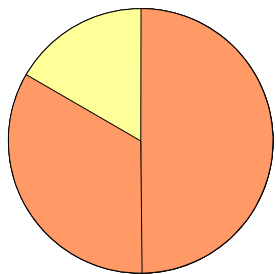


		D	D	D	L	V	S	
X	⊕	⊕	⊕	C	X	I	O	
								S
								C
								2

FRAZIONI



S ...



“Manca un sesto”

Diagram illustrating fractions using a grid of vertical bars and symbols.

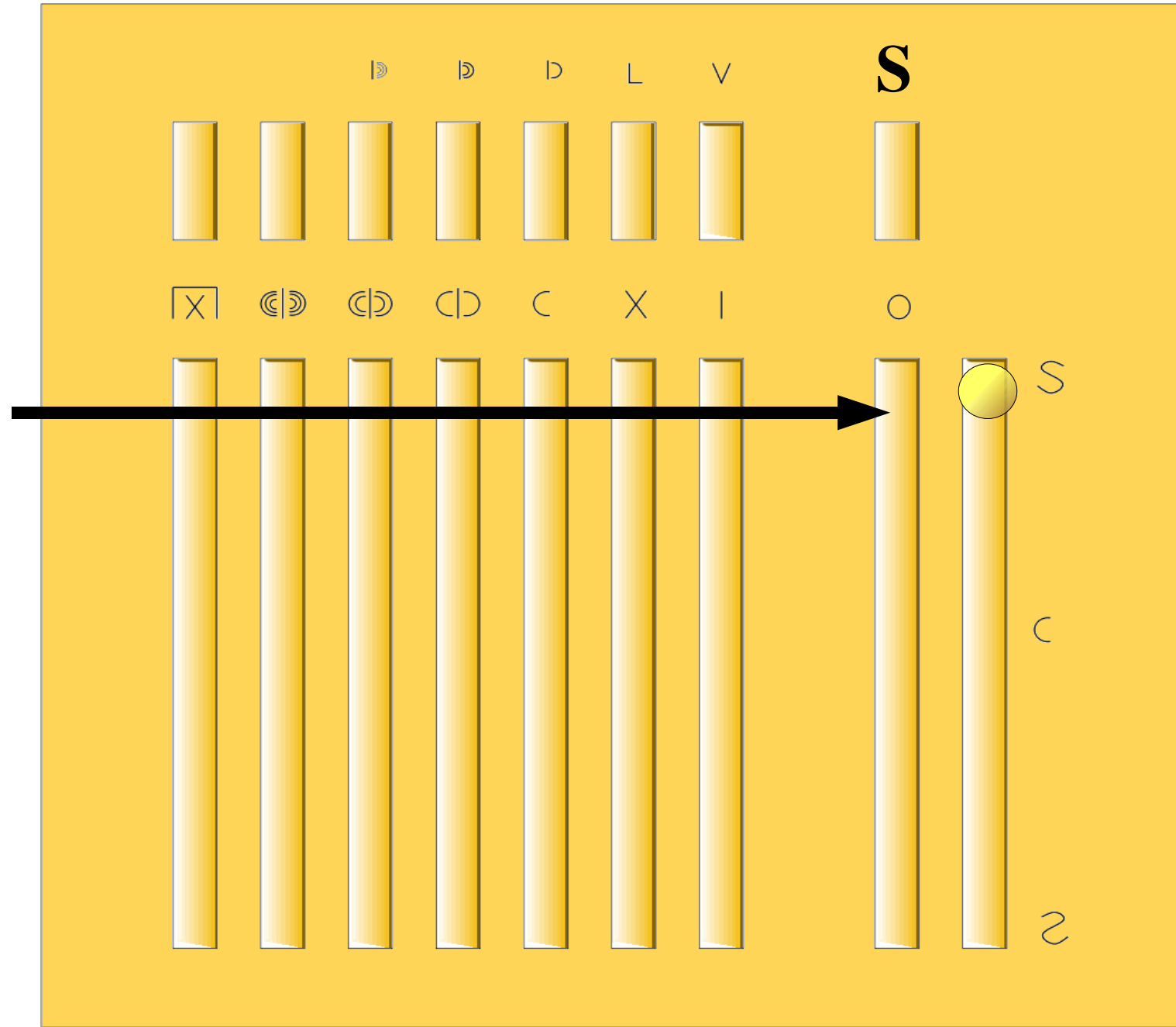
The grid consists of 8 columns and 2 rows of vertical bars. Above the top row are the letters **D**, **D**, **D**, **L**, **V**, and **S**. Below the top row are the symbols \square , \odot , \odot , \odot , \odot , \times , and \odot . Below the bottom row are the letters **S**, **C**, and **S**.

The **S** column contains one yellow circle in the top bar and four yellow circles in the bottom bar. The **C** column contains one yellow circle in the bottom bar.

FRAZIONI

Frazioni dell'oncia

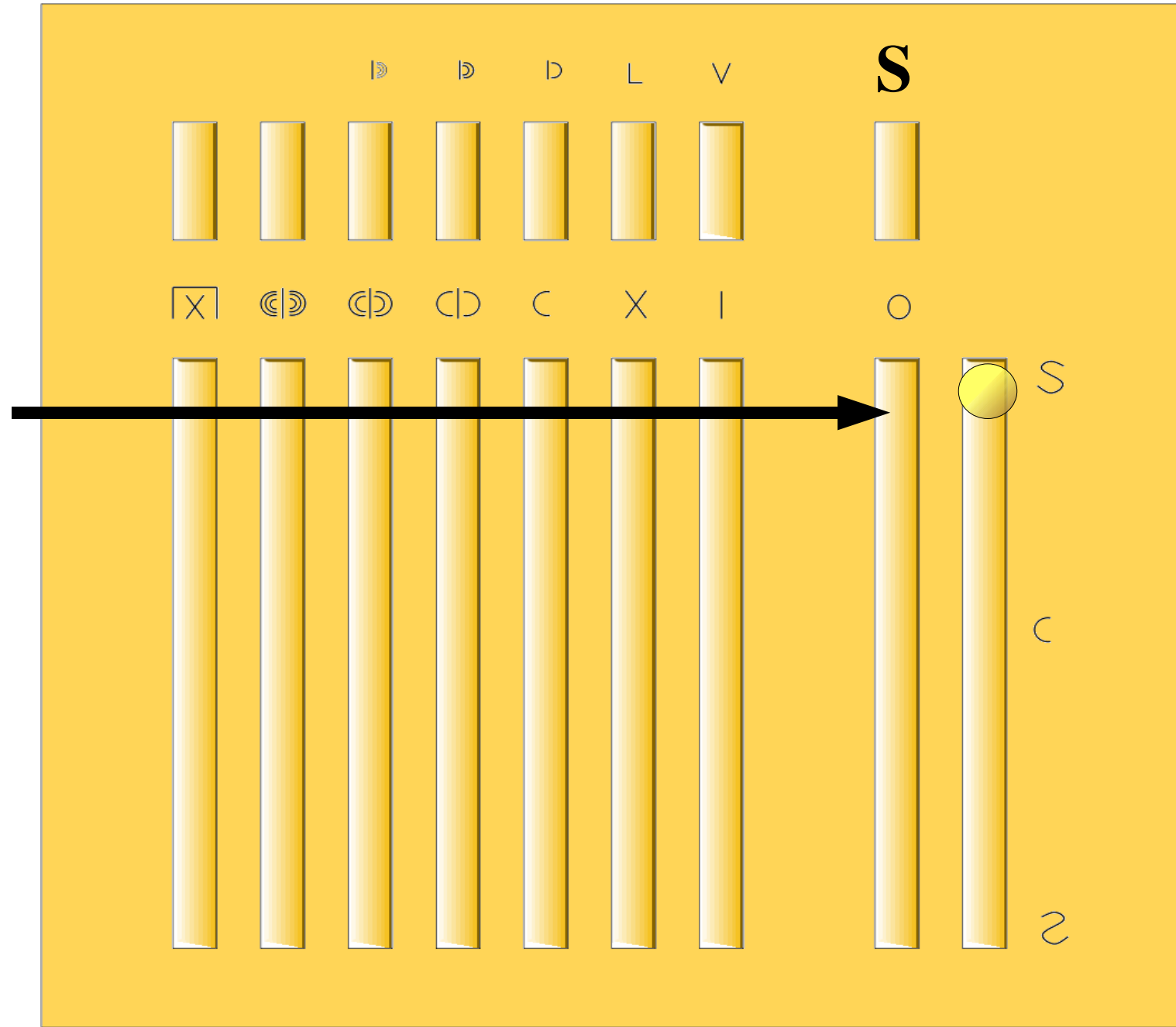
Semioncia *S*
(metà di un'oncia)



FRAZIONI

Frazioni dell'oncia

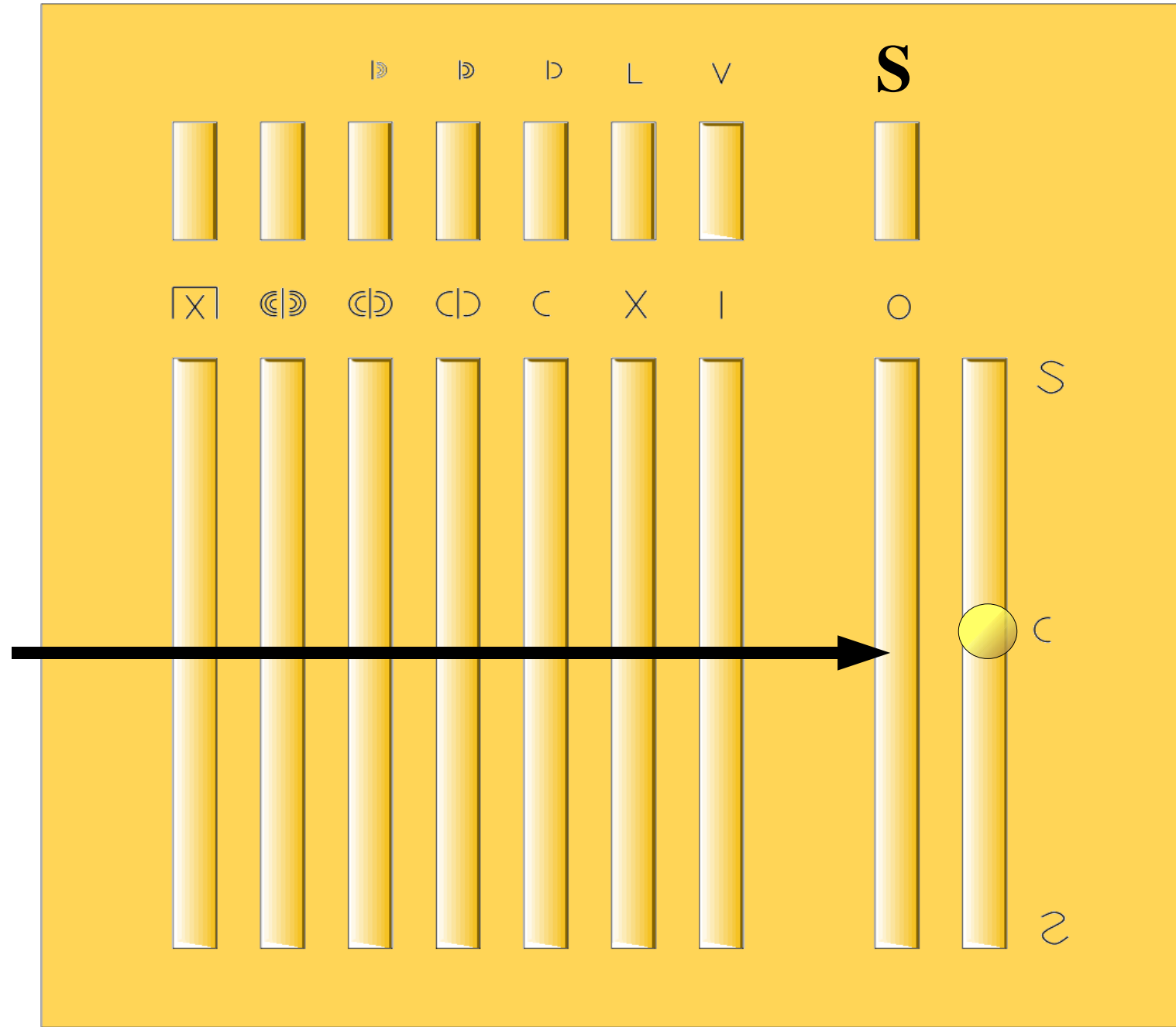
Semioncia *S*
(metà di un'oncia)
 $1/24$



FRAZIONI

Frazioni dell'oncia

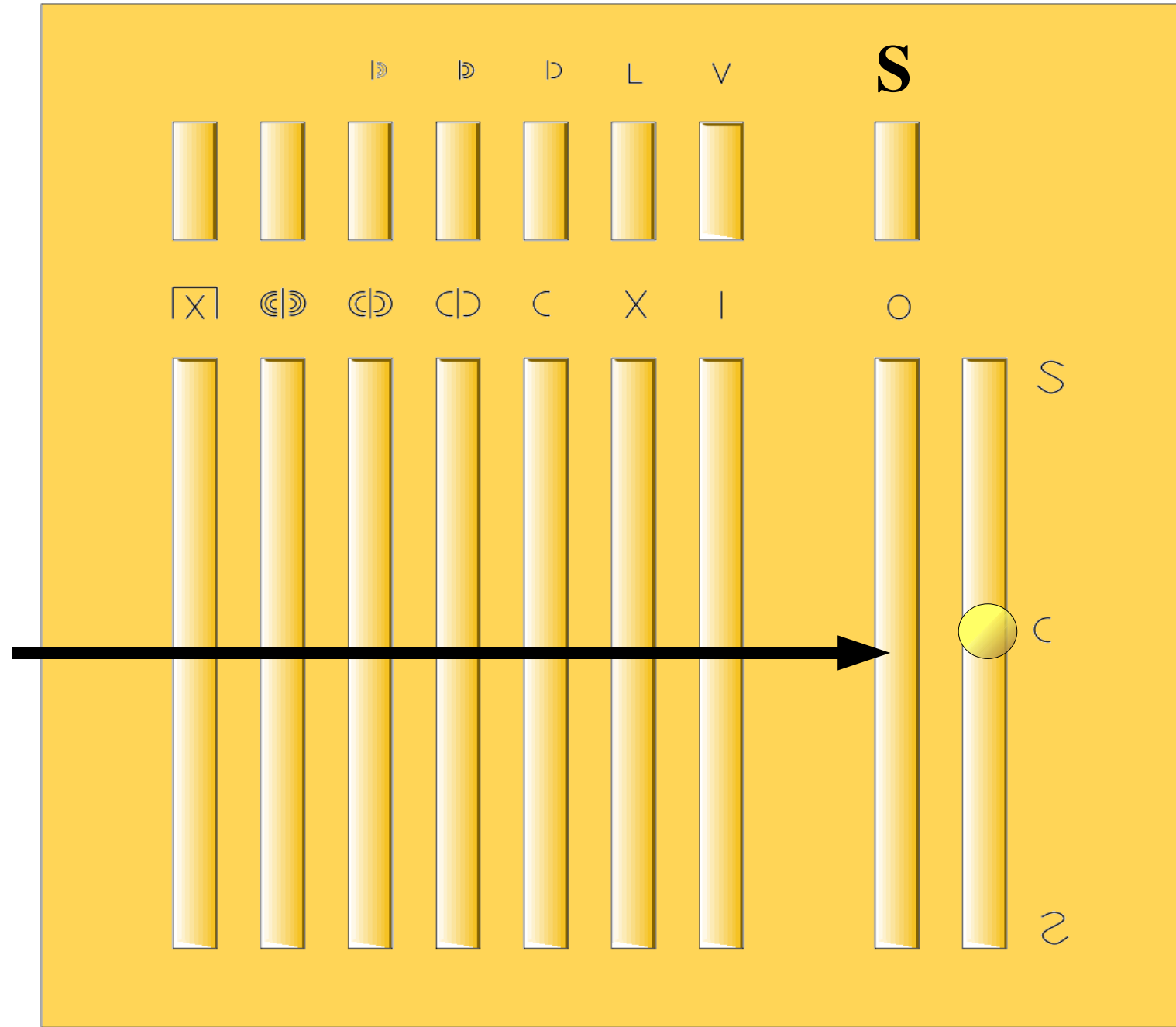
Un quarto di oncia



FRAZIONI

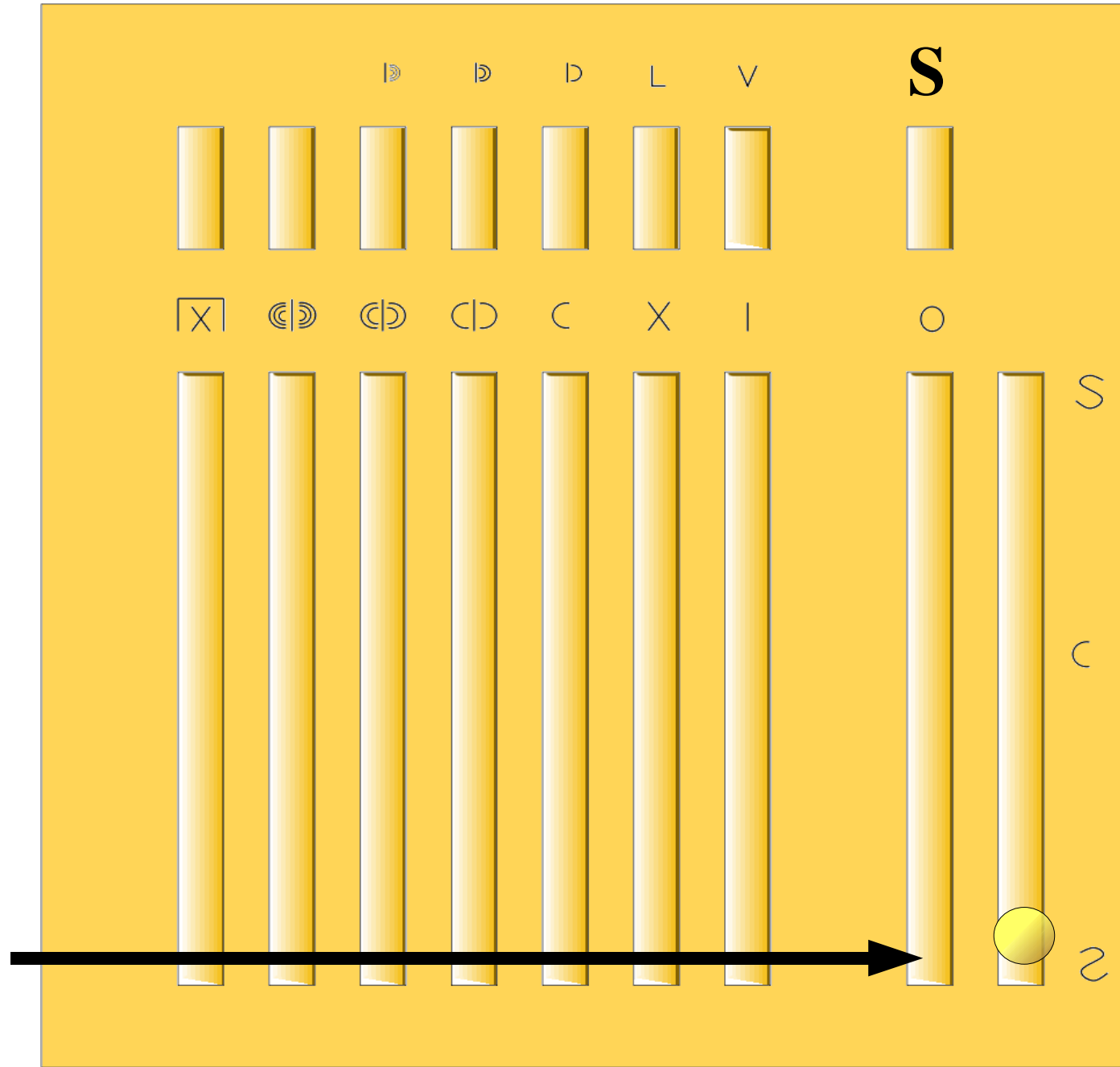
Frazioni dell'oncia

Un quarto di oncia
 $1/48$



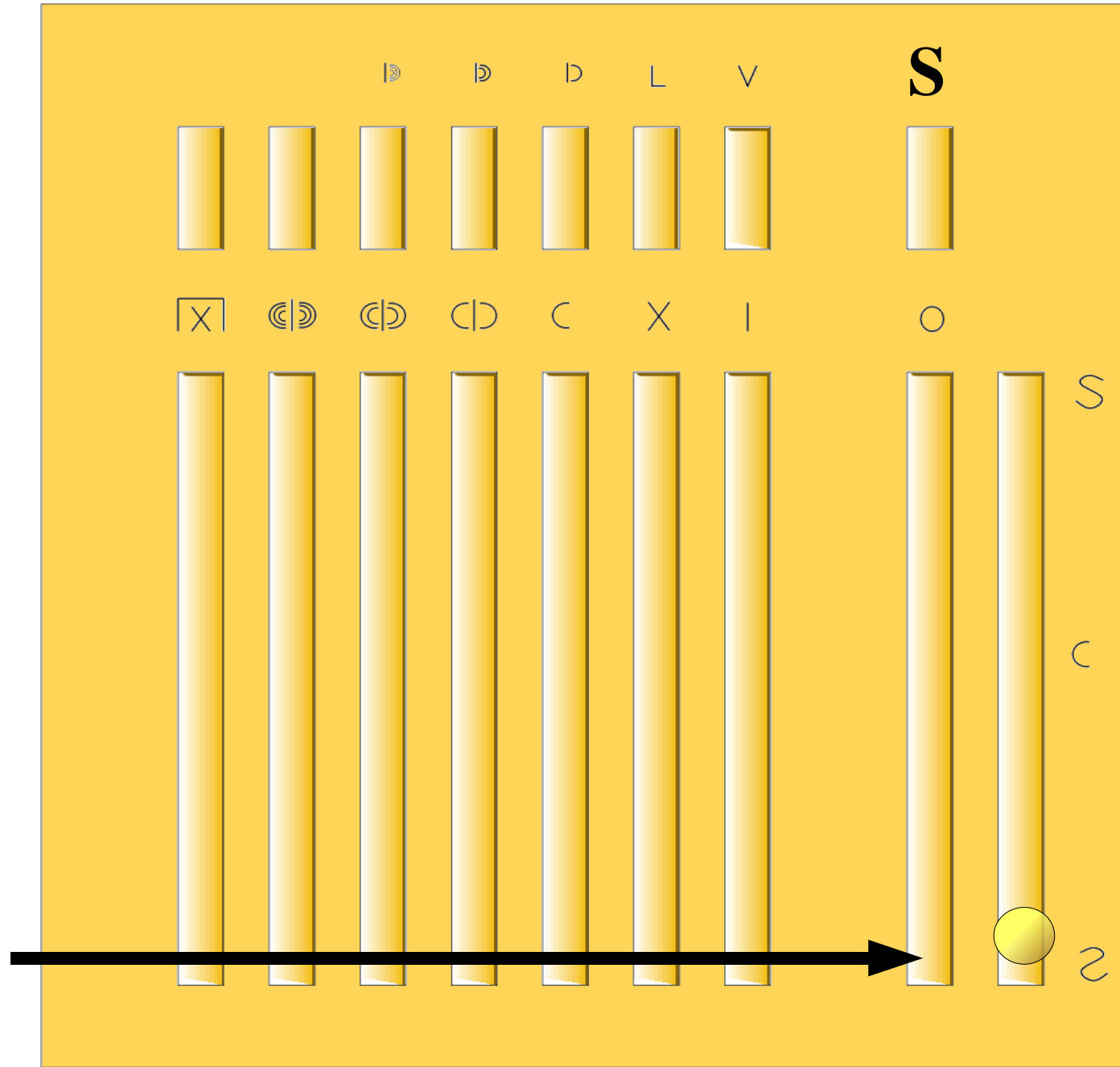
FRAZIONI

Frazioni dell'oncia



FRAZIONI

Frazioni dell'oncia



Un sesto di oncia
 $1/72$

L'asse, o più precisamente l'aes grave (o aes librale), fu la prima moneta romana. Il valore del bronzo che conteneva era legato alle [unità di peso romane](#),



L'oncia (in latino uncia, plurale unciae), con un peso di circa 27 grammi, era la base del sistema duodecimale di sottomultipli dell'asse, con un valore pari ad un dodicesimo di questo e la marca di una piccola sfera.



Il sestante (in latino sextans) era il sottomultiplo pari ad un sesto dell'asse, quindi 2 once. Sul dritto della moneta era rappresentato Mercurio



Il quadrante (in latino quadrans, letteralmente "un quarto") era la frazione che valeva 1/4 di un asse e quindi 3 once, valore indicato dai tre globuli presenti sulle sue facce. Sul dritto veniva raffigurata la testa di Ercole, mentre il rovescio aveva la solita prora di galea.



Il triente (in latino triens, plurale trientes) era il sottomultiplo che valeva un terzo dell'asse, cioè 4 once. Il tipo più comune di triente aveva al dritto Minerva con quattro globuli



Il semisse (in latino semis, plurale semisses) era la frazione che valeva la metà di un asse, cioè sei once. Il suo valore era indicato da una 'S' sul retro che riportava anche l'immagine di una prora di nave, mentre sul fronte la moneta riportava l'immagine di Saturno.

- **L'ABACO**

Orazio, *Ars poetica*

325 - 330

*Romani pueri longis rationibus assem
discunt in partes centum diducere. 'Dicat
filius Albini: Si de quincunce remota est
uncia, quid superat? Poteras dixisse.' 'Triens.' 'Eu!
Rem poteris servare tuam! Redit uncia, quid fit?'
'Semis.'*

Mentre ai nostri ragazzi s'insegnano lunghi calcoli
per dividere in centesimi un asse:

'A te, figlio di Albino: se da cinque once se ne
toglie una, cosa resta di un asse? Avanti, che lo sai...' 'Un terzo.' 'Bene,
saprai conservare il tuo patrimonio! E se invece aggiungi un'oncia, cosa ti viene?'
'Mezzo asse.'

- L'ABACO

Orazio, *Ars poetica*

325 - 330

*Romani pueri longis rationibus assem
discunt in partes centum diducere. 'Dicat
filius Albini: Si de quincunce remota est
uncia, quid superat? Poteras dixisse.' 'Triens.' 'Eu!
Rem poteris servare tuam! Redit uncia, quid fit?'
'Semis.'*

$$5/12 - 1/12 = 4/12, \text{ cioè } 1/3 \text{ di asse}$$



$$5/12 + 1/12 = 6/12, \text{ cioè } 1/2 \text{ di asse}$$

Mentre ai nostri ragazzi s'insegnano lunghi calcoli
per dividere in centesimi un asse:

'A te, figlio di Albino: se da cinque once se ne
toglie una, cosa resta di un asse? Avanti, che lo sai...' 'Un terzo.' 'Bene,
saprai conservare il tuo patrimonio! E se invece aggiungi un'oncia, cosa ti viene?'
'Mezzo asse.'

