

# Chinese numerals

The development of mathematics has a very long history in China, dating back to five to six thousand years ago where people used tying knots to record numbers, till using the bones of turtles (甲骨) to record large numbers during the Hsia and Shang Periods (夏商時期). Furthermore, counting rods and abacuses have played an important role in the development of mathematics in China for over a thousand years, firmly building up the use of place values in recording numbers.

### Counting rods 算籌

During the Warring Kingdom (戰國時代), it was quite common for Chinese people to use objects like bamboo sticks to record numbers and do calculations. This practice has been carrying on till the Yüan Dynasty (元朝). Such calculating tools are called counting rods.



Number	1	2	3	4	5	6	7	8	9
Vertical form		11		1111		7	П	TT	Ш
Horizontal form							1	블	<b>≟</b>





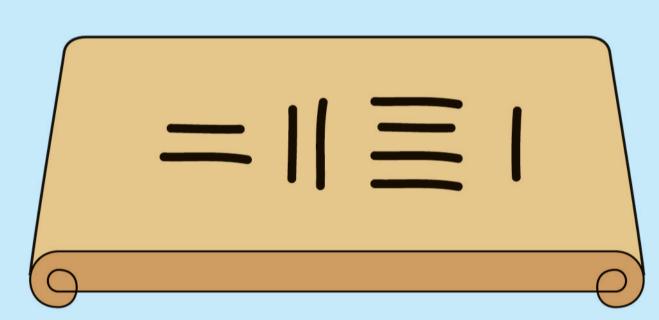
represents 361

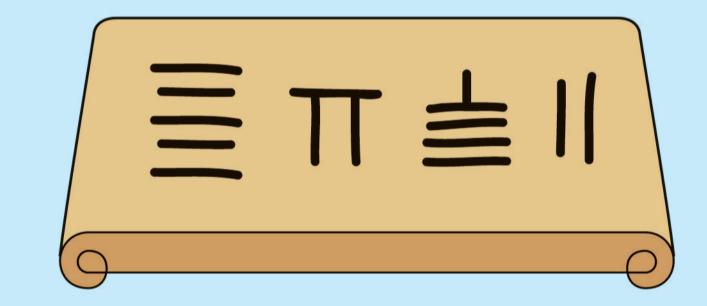


represents 23



What numbers are represented by the following arrangements of counting rods?





## Special Chinese numerals 中國數碼

The use of counting rods gradually changed to the use of special Chinese numerals for recording numbers.

Number	0	1	2	3	4	5	6	7	8	9	10	100	1000	10000
Special	$\bigcirc$	1	11	111	\ <u>\</u>	V		1_		b	L	云	土	-
Chinese numeral		_	=	三	X	8	上	=	三	× L	7	百		A

#### Examples



represents \$24

十九川一川

represents \$312

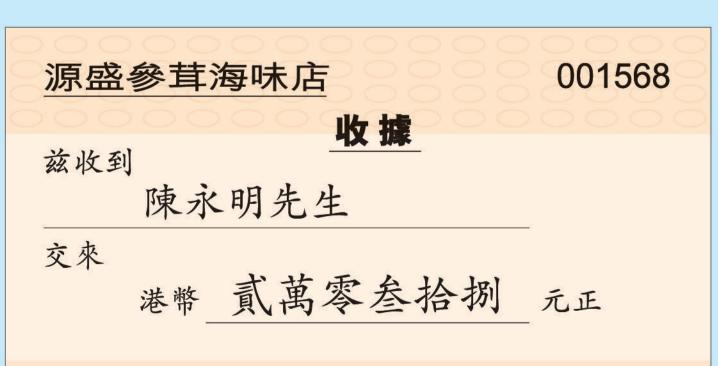
Even now there are people still using special Chinese numerals to represent a certain amount of money.

#### Chinese numerals 中國數字

The Chinese numerals (simple form) we use today only first appeared in the Han Dynasty (漢朝).

Number	0	1	2	3	4	5	6	7	8	9	10	100	1000	10000
Numeral (simple form)	零	_	1	11	四	五	六	セ	八	九	+	百	千	萬
Numeral (complex form)	零	壹	貳	叁	肆	伍	陸	柒	捌	玖	拾	佰	仟	萬





The complex form of Chinese numerals is often used for writing an amount of money in cheques and receipts in order to avoid other people changing them.

