Mayan Numeration System

This is similar to a base-20 place value system: $20^0 = 1$, 20^1, $20*18$, 20^2*18, 20^3*18, 20^4*18, …

The numerals are represented vertically with the lowest place value at the bottom and a space separating each place value.

There are three symbols:

	0
	1
	5

To convert a Mayan numeral to base-10 (Hindu-Arabic): sum the value of the symbols in each place and then multiply by the place value.

For example: The Mayan numeral  is equivalent to the base-10 number

Face value	Place Value	Face Value times Place Value
1	$20^3 * 18 = 144,00$	144,000
0	$20^2 * 18 = 7,200$	0
5 + 5 + 1 + 1 +1 + 1 = 14	20 * 18 = 360	5,040
5 + 1 + 1 + 1 = 8	$20^1 = 20$	160
5 + 5 + 5 = 15	$20^0 = 1$	15

Base-10 equivalent is: 144,000 + 0 + 5,040 + 160 + 15 = 149,215

To convert a base-10 number to Mayan we need to divide by the place values.

For example: Convert 8,292 to Mayan:

Place Values		Face Value
$20^3*18 = 144{,}000$	Larger than 8,292 so not possible	
$20^2*18 = 7{,}200$	8292 ÷ 7200 = 1 with remainder 1092	1
$20*18 = 360$	1092 ÷ 360 = 3 with remainder 12	3
$20^1 = 20$	12 ÷ 20 = 0 with remainder 12	0
$20^0 = 1$	12 ÷ 1 = 12 with no remainder	12

Mayan Numeral is