Roman Numerals

What are Roman Numerals?
Roman Numerals was a system that was the way that the Roman's would write different numbers. Instead of using numbers.

- The Hindu-Arabic numeration system uses 10 digits 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 to write any other numeral.
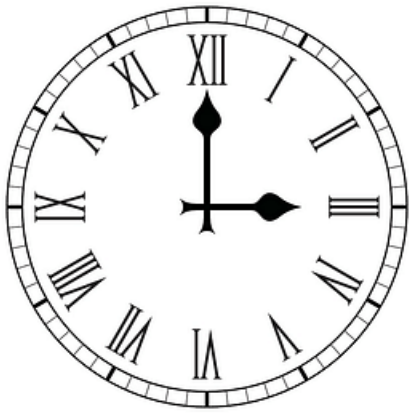- The Romans had seven basic symbols to write any number. These seven symbols are I, V, X, L, C, D, and M.

Basic Roman Numerals**The Roman numerals with their corresponding Hindu-Arabic numerals are as follows:**

Roman Numerals	I	V	X	L	C	D	M
Hindu-Arabic Numerals	1	5	10	50	100	500	1000

- These basic Roman symbols are combined in a specific manner to form other Roman numerals.
- Roman numerals are used in some analogue clocks and watches, to name the classrooms in the schools, for the copyright date on films programmes, etc.

One to Twelve Roman Numbers written on a watch.

Rules for Forming Roman Numerals
The following rules are used to write the numbers in the Roman system.

Rule Number 1
When a Roman numeral is repeated more than once, we add its value each time to get the number.

Examples:

- II = 1 + 1 = 2,
- XX = 10 + 10 = 20,
- XXX = 10 + 10 + 10 = 30

Tips:

- The same symbol is not repeated more than 3 times together.
- The symbols V, L and D are never repeated.
- There is no symbol for zero in the Roman system.
- Symbols I, X and V are used to write Roman numerals up to 39.

Roman Numerals Chart - 1 to 10

Arabic	Roman
1	I
2	II
3	III
4	IV
5	V
6	VI
7	VII
8	VIII
9	IX
10	X

Rule Number 2
When a smaller Roman numeral is written to the right of a greater Roman numeral, the value of the greater numeral is added to the smaller numeral.

Examples:

- VI = 5 + 1 = 6,
- XII = 10 + 1 + 1 = 12,
- XXXVI = 10 + 10 + 10 + 5 + 1 = 36

Roman Numerals: 1 - 1000

I	V	X	L	C	D	M
1	5	10	50	100	500	1000

1	I	11	X1	200	CC
2	II	20	XX	300	CCC
3	III	30	XXX	400	CD
4	IV	40	XL	500	D
5	V	50	L	600	DC
6	VI	60	LX	700	DCC
7	VII	70	LXX	800	DCCC
8	VIII	80	LXXX	900	CM
9	IX	90	XC	1000	M
10	X	100	C	1001	MI

Rule Number 3
When a smaller Roman numeral is written to the left of a greater Roman numeral, it is always subtracted from the value of the greater numeral.

Examples:

- IV = 5 – 1 = 4,
- IX = 10 – 1 = 9

Tips:

- Symbol I can be subtracted only once.
- The symbols V, L and D are never subtracted.

Rule Number 4
When a smaller Roman numeral is placed between two greater Roman numerals, then its value is subtracted from the value of the greater numeral on its right.

Examples:

- XIX = 10 + (10 – 1) = 10 + 9 = 19
- XXIV = 10 + 10 + (5 – 1) = 20 + 4 = 24

Example 1: Write the following in Hindu-Arabic numerals.
(a) XII
(b) VII
(c) XV
(d) XIV
(a) XII = 10 + 1 + 1 = **12**
(b) VII = 5 + 1 + 1 = **7**
(c) XV = 10 + 5 = **15**
(d) XIV = 10 + (5 − 1) = **14**

Example 2: Write the following in Roman numerals.
(a) **37**
(b) **16**
(c) **28**
(d) **34**
(a) 37 = 30 + 7 = X + X + X + V + I + I = **XXXVII**
(b) 16 = 10 + 6 = X + V + I = **XVI**
(c) 28 = 20 + 8 = X + X + V + I + I + I = **XXVIII**
(d) 34 = 30 + 4 = X + X + X + IV = **XXXIV**