

20 April 2020.

Class Work Only Revise

Roman Numerals

In our number system, we use ten digits: 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 to represent all numbers. People in ancient India developed these numbers and Arabs spread them to the other countries. Hence, numbers formed by these digits are known as Hindu-Arabic numbers or International numbers.

In ancient days, Romans had a different system of numbers. They used only 7 symbols to write numbers. These symbols are: I, V, X, L, C, D and M respectively. The value of each of these is given below:



Remember

- Romans had no symbol for Zero.

Roman Symbols	I	V	X	L	C	D	M
Value of Symbols	1	5	10	50	100	500	1000

We still use Roman numerals today. Sometimes, the units of a book and classrooms in a school are marked in Roman numerals.

Do in fair Copy C/W

Rules for Writing Roman Numerals

1. Numerals I and X can be repeated to form a number. Repetition of these symbols means addition. These symbols cannot be repeated more than 3 times.

Example: III = (1 + 1 + 1) = 3; XXX = (10 + 10 + 10) = 30

2. When a smaller numeral is on the left of a greater numeral, we subtract the smaller one from the greater one.

Example: IV = (5 - 1) = 4; IX = (10 - 1) = 9

3. When a smaller numeral is on the right of a greater numeral, we add the smaller one to the greater one.

Example: VI = (5 + 1) = 6; XI = (10 + 1) = 11



Remember

- Symbol V is never repeated.

Roman Numeral Table

With the help of the rules, we can write Roman numerals corresponding to the Hindu-Arabic numbers.



f/c

Roman Numeral	Hindu-Arabic Number
XXI	21
XXII	22
XXIII	23
XXIV	24
XXV	25
XXVI	26
XXVII	27
XXVIII	28
XXIX	29
XXX	30
XXXI	31
XXXII	32
XXXIII	33
XXXIV	34
XXXV	35
XXXVI	36
XXXVII	37
XXXVIII	38
XXXIX	39

P/c

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

f/c

Roman Numeral	Hindu-Arabic Number
XI	11
XII	12
XIII	13
XIV	14
XV	15
XVI	16
XVII	17
XVIII	18
XIX	19
XX	20



Activity

Read the message by decoding the Roman numeral.

Rule: First change the numerals into Hindu-Arabic numbers, then find the alphabet letter that matches each numeral.

XIII	XXVI	XX	VIII	XIX
M				

IX	XIX	VI	XXI	XIV

Code		
A	=	26
F	=	6
I	=	9
H	=	8
S	=	19
T	=	20
M	=	13
U	=	21
N	=	14

[Make different Roman numerals using Roman numeral cards from your Math kit.]

Do in fair Copy.

1. Match the following as shown.

Hindu-Arabic Numbers

9
15
12
28
20
18
35
27

Roman Numerals

XXXV
XVIII
XX
XXVII
IX
XV
XII
XXVIII

2. Write the Hindu-Arabic numbers for the following:

(a) XXXIX

(b) V

(c) XXX

(d) XVI

(e) XXI

(f) X

(g) XXV

(h) XIX

3. Which of the following are wrong? Mark (X).

(a) VV

(b) III

(c) VI

(d) XV

(e) XXVV

(f) XIV

(g) XVI

(h) VX

4. Fill in the blanks using sign $>$, $<$ or $=$.(a) IV X(b) XVI XXX(c) XI VI(d) VII XII(e) XIII XIII(f) XVII XVI(g) XXV IX(h) XXX XXX

5. Add the following and write the answer in Hindu-Arabic numerals.

(a) $V + V =$

(b) $III + X =$

(c) $X + V =$

(d) $II + XX =$

(e) $X + IX =$

(f) $V + IV =$

(g) $XXV + X =$

(h) $XXX + XX =$