

# ROMAN NUMERALS

Romans developed a different system of numeration about 2000 years ago Roman numerals. There are seven basic Roman numerals. These numerals and corresponding Hindu Arabic numerals are given below.

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

## Writing Numbers in Roman Numerals

You already know about the numerals I, V and X and the method to write numbers up to 39. Here, we will learn how to write large numbers using Roman numerals.

*Note! There is no symbol form in Roman system*

**Rule 1 When a letter is used more than once, we add its value each time to get the number**

Examples: II = 1 + 1 = 2

XXX = 10 + 10 + 10 = 30

CCC = 100 + 100 + 100

MM = 1000 + 1000 = 2000

MMM = 1000 + 1000 + 1000 = 3000

**Note!**

- 1. The some symbol cannot be repeated more than 3 times together*
- 2. The symbol V, L ond ore never repeated*

**Rule 2 When a symbol of smaller value is written to the right of a symbol of larger value, add the two values.**

Examples:

- $VII = 5 + 1 + 1 = 7$
- $XXVII = 10 + 10 + 5 + 1 + 1 = 27$
- $LXVI = 50 + 10 + 5 + 1 = 66$
- $CLXV = 100 + 50 + 10 + 5 = 165$
- $XII = 10 + 1 + 1 = 12$
- $LVII = 50 + 5 + 1 + 1 = 57$
- $CVII = 100 + 5 + 1 + 1 = 107$
- $DC = 500 + 100 = 600$
- $MDCXVIII = 1000 + 500 + 100 + 10 + 5 + 1 + 1 + 1 = 1618$

**Rule 3** When a symbol of smaller value is written to the left of a symbol of larger value, the smaller value is subtracted from the larger value.

**Note !**

*1. V, L and D are never subtracted.*

*2. I can be subtracted from V And X only once.*

*X can be subtracted from L and C only once.*

*C can be subtracted from D and M only once.*

*Thu, I or V is never written to the left of L or C, L never written to the left of C*

Examples:

- $IV = 5 - 1 = 4$
- $IX = 10 - 1 = 9$
- $XL = 50 - 10 = 40$
- $XC = 100 - 10 = 90$
- $CD = 500 - 100 = 400$
- $CM = 1000 - 100 = 900$

## Large Roman Numerals

With the help of chart given below, you can write large numbers in Roman numerals.

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

## Self Practice 4

### 1. Fill in the blanks.

- (a)  $XIV = \underline{10 + 4} = 14.$
- (b)  $CCXXIX = \underline{200+20+9} = 229.$
- (c)  $CXLVIII = \underline{100+40+8} = 148.$
- (d)  $CDLII = \underline{500-100+5+2} = 452.$

### 2. Write the following Roman numerals in the Hindu-Arabic system.

- (a)  $IV = 5-1 = 4$
- (b)  $IX = 10-1 = 9$
- (c)  $XXX = 10 + 10+10 = 30$
- (d)  $XVI = 10 + 6 = 16$
- (e)  $XXII = 20+ 2 = 22$
- (f)  $XXXVII = 30+ 7 = 37$

(g)  $LVI = 50 + 6 = 56$

(h)  $LII = 50 + 2 = 52$

(i)  $XLIV = 40 + 4 = 44$

(j)  $XLI = 40 + 1 = 41$

(k)  $LV = 50 + 5 = 55$

(l)  $LXXXI = 80 + 1 = 81$

(m)  $LIX = 50 + 9 = 59$

(n)  $XCIV = 90 + 4 = 94$

(o)  $CCLI = 200 + 51 = 251$

(p)  $CMLXXIV = 900 + 70 + 4 = 974$

(q)  $CDXXXII = 400 + 30 + 22 = 432$

(r)  $MXV = 1000 + 10 + 5 = 1015$

(s)  $CDXLIX = 400 + 40 + 9 = 449$

(t)  $CMLXIX = 900 + 60 + 9 = 969$

**3. Give the corresponding Roman numerals.**

a).  $5 = V$

b).  $9 = IX$

c).  $12 = XII$

d).  $19 = XIX$

e).  $59 = 50 + 9 = L + IX = LIX$

f).  $20 = 10 + 10 = XX$

g).  $64 = 60 + 4 = LX + IV = LXIV$

**h).**  $89 = 80 + 9 = LXXX + IX = LXXXIX$

**i).**  $41 = 40 + 1 = XL + I = XLI$

**j).**  $3280 = 3000 + 200 + 80 = MMM + CC + LXXX = MMMCCLXXX$

**k).**  $472 = 400 + 70 + 2 = CD + LXX + II = CDLXXII$

**l).**  $605 = 600 + 5 = DC + V = DCV$

**m).**  $1110 = 1000 + 100 + 10 = M + C + X = MCX$

**n).**  $2413 = 2000 + 400 + 13 = MM + CD + XIII = MMCDXIII$

**o).**  $999 = 900 + 90 + 9 = CM + XC + IX = CMXCIX$

**4. Write true (T) or false (F) for the following .**

**(a)** .If the Roman numerals M,D,C,L,V,X,I appear in descending order, we add their values. **(T)**

**(b)** . The numeral for IXIV is 94. **(F)**

**(c)** . CCCI is written as 301. **(T)**

**(d)** . MC represents 1100. **(T)**

**(e)** . MD is the Roman numeral for 1500. **(T)**

**(f)** 1027 is same as MXXVII . **(T)**

**(g)** 114 can be written as CIV. **(F)**