

# Roman Numerals

Roman numerals are expressed by letters of the alphabet:

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

There are three basic principles for reading and writing Roman numerals:

**1. A letter repeats its value that many times (XXX = 30, CC = 200, etc.). A letter can only be repeated three times.**

**2. If one or more letters are placed after another letter of greater value, add that amount.**

$$VI = 6 (5 + 1 = 6)$$

$$LXX = 70 (50 + 10 + 10 = 70)$$

$$MCC = 1200 (1000 + 100 + 100 = 1200)$$

**3. If a letter is placed before another letter of greater value, subtract that amount.**

$$IV = 4 (5 - 1 = 4)$$

$$XC = 90 (100 - 10 = 90)$$

$$CM = 900 (1000 - 100 = 900)$$

Several rules apply for subtracting amounts from Roman numerals:

a. Only subtract powers of ten (I, X, or C, but not V or L)

For 95, do NOT write VC (100 - 5).

DO write XCV (XC + V or 90 + 5)

b. Only subtract one number from another.

For 13, do NOT write IIXV (15 - 1 - 1).

DO write XIII (X + I + I + I or 10 + 3)

c. Do not subtract a number from one that is more than 10 times greater (that is, you can subtract 1 from 10 [IX] but not 1 from 20—there is no such number as IXX.)

For 99, do NOT write IC (C - I or 100 - 1).

DO write XCIX (XC + IX or 90 + 9)

One	I	Eleven	XI	Thirty	XXX
Two	II	Twelve	XII	Forty	XL
Three	III	Thirteen	XIII	Fifty	L
Four	IV	Fourteen	XIV	Sixty	LX
Five	V	Fifteen	XV	Seventy	LXX
Six	VI	Sixteen	XVI	Eighty	LXXX
Seven	VII	Seventeen	XVII	Ninety	XC
Eight	VIII	Eighteen	XVIII	One hundred	C
Nine	IX	Nineteen	XIX	Five hundred	D
Ten	X	Twenty	XX	One thousand	M