

ROMAN NUMERALS CONNECTIONS

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Significance of Roman Numerals

- a) There is no zero.
- b) The system is not a place-value system. The Roman numeral V is always 5, no matter *where* it is; our numeral 5 could be 50 or 500 or five tenths, depending on place, hence "place value."
- c) They are still in use: Superbowls, Indy Jones, old books/films.

Symbols

I = 1 V = 5 X = 10 L = 50

C = 100 D = 500 M = 1000 \overline{V} = 5000

From there, any bar over a symbol means multiply by 1000. So Roman numerals are a "multiplicative" system.

Repeating Rules

I, X, C, and M may be repeated, up to three times maximum. The only exception is the clock face, which has IIII for IV, when IV may be misread. A recent newspaper account by an unreliable source claimed that a "modern" Roman Numeral system allows four repetitions to replace the subtraction rules given below. Nowhere else has such a system been mentioned. It is difficult to imagine why any modern Romans would have any interest in this.

"Subtraction-Preceding" Rules

Powers of ten (I, X, and C) may precede their multiplies-by-5-or-10 for subtraction as shown:

I may precede V (IV = 4) and I may precede X (IX = 9).

X may precede L (XL = 40) and X may precede C (XC = 90).

C may precede D (CD = 400) and C may precede M (CM = 900).

These are the ONLY times when a smaller unit may precede a larger.

Examples

IC is not 99 ; 99 = XCIX .

648 = DCXLVIII.

Numbering

I	VI	XI	XVI	XXI	XXVI	XXXI	XXXVI	XLI	XLVI
II	VII	XII	XVII	XXII	XXVII	XXXII	XXXVII	XLII	XLVII
III	VIII	XIII	XVIII	XXIII	XXVIII	XXXIII	XXXVIII	XLIII	XLVIII
IV	IX	XIV	XIX	XXIV	XXIX	XXXIV	XXXIX	XLIV	XLIX
V	X	XV	XX	XXV	XXX	XXXV	XL	XLV	L

Exercise: Roman Numeral Chart Organization**By ones, 1 to 100:**

I									
II									
III									
IV									
V									
VI									
VII									
VIII									
IX									
X	XX	XXX	XL	L	LX	LXX	LXXX	XC	C

By tens, 1 - 1000

X									
XX									
XXX									
XL									
L									
LX									
LXX									
LXXX									
XC									
C	CC	CCC	CD	D	DC	DCC	DCCC	CM	M

Given the above, writing any number involves systematic combining. Every digit of the Hindu-Arabic notation is replaced by one OR MORE Roman Numeral(s).

Practice Roman Numeral versions of dates:

In what year were *Gone With the Wind* and *The Wizard of Oz* released? Write 1939 in Roman numerals.

In what year was your professor born?
Write 1947 in Roman Numerals.

In what year was Dr. H's youngest (Molly) born? Write 1983 in Roman Numerals.