

## Little Roman numeral lesson

People sometimes have trouble deciphering Roman numerals. Do you?

1. When was Alfred Nobel born? (in Hindu-Arabic<sup>1</sup> numbers ... like 425) \_\_\_\_\_
2. When did he die? \_\_\_\_\_
3. How long did he live? \_\_\_\_\_

The basic characters of Roman Numerals are:

I	one
V	five
X	ten
L	fifty
C	one hundred
D	five hundred
M	one thousand

For very large numbers, a bar above the symbol means that this represents thousands. For instance,  $\overline{V}$  means 5,000.

***Roman numerals are ordinarily written in descending order of quantity.***

For example:

**MCCLVI** is written with the thousands first on the left (M) then there are two one hundreds (CC), then a fifty (L), then a five (V), and finally a one (I). When the smaller symbols follow larger symbols you simply add their values to find the Hindu-Arabic equivalent.

**MCCLVI** means  $1000+100+100+50+5+1 = 1256$ .

VII is  $5 + 2 = 7$

LV is  $50 + 5 = 55$

MDCLXVI is  $1,000 + 500 + 100 + 50 + 10 + 5 + 1 = 1,666$

4. What number do these Roman numerals represent?

LXXVIII \_\_\_\_\_

MCCCXIII \_\_\_\_\_

***When a larger symbol is written to the right of smaller symbols*** then you must subtract the smaller value from the larger to calculate their meaning.

IV  $5 - 1 = 4$

XL  $50 - 10 = 40$

5. What number do these Roman numerals represent?

CMXCIX \_\_\_\_\_

MMMCCCXLIX \_\_\_\_\_

6. So, what is year 2014 written in Roman numerals? \_\_\_\_\_

7. Roman numerals are used for numbering the Olympics, numbering the Super Bowls, writing outlines and often for copyright dates. Usually the pages before Chapter 1 in a book are written in lower case Roman numerals. (i, ii, iii, iv, etc.)

- a. In 2012 the summer Olympics was in London. What was the Roman numeral representation for this event? \_\_\_\_\_
- b. In 2016 the summer Olympics will be in Rio de Janeiro. What is this year in Roman numerals? \_\_\_\_\_
- c. My copy of Catcher in the Rye has the copyright date of MCMLI. When was my book written? (Answer in Hindu-Arabic notation) \_\_\_\_\_
- d. The movie King Kong was made in MCMXXXIII. When was that? \_\_\_\_\_

8. **Wicked weird Roman numeral math.** See if you can do this math thinking only Roman numerally.

- |           |        |                |
|-----------|--------|----------------|
| a. XXXVII | b. CLX | c. MMCCCLXXXII |
| - XXV     | + XXI  | - MCLXXI       |

9. Now translate the previous addition and subtraction problems into Hindu-Arabic notation and do the math again.

- |    |    |    |
|----|----|----|
| a. | b. | c. |
|----|----|----|

10. Was doing the arithmetic in Roman numerals easier than doing the math in Hindu-Arabic numbers?

\_\_\_\_\_

Why do you think that is so?

\_\_\_\_\_  
\_\_\_\_\_

<sup>1</sup>Hindu-Arabic numbers were first developed in India. The number system was adopted and used in trade with Arab countries and from there the numbers were adopted by Europe in the middle ages. Leonardo Pisano (Fibonacci) introduced the numbers to Europe in his book Liber Abaci (1202)

\* What is the date 1202 in Roman numerals? \_\_\_\_\_