



Gordon Burgin's Puzzles

Roman arithmetic

In mathematics, 'Roman Arithmetic' is the use of arithmetical operations on 'Roman Numerals'. Roman numerals are a numeral system of ancient Rome based on letters of the alphabet, which are combined to signify the sum or difference of their values. The Romans depicted numbers using seven letters of the alphabet as numerals: I = 1, V = 5, X = 10, L = 50, C = 100, D = 500 & M = 1000. The Roman numeral system does not include a zero and is shown from 1 to 10 as: I, II, III, IV, V, VI, VII, VIII, IX & X.

Example: The year 2017 in Roman Numerals is MMXVII. Symbols are written and read from left to right, from highest to lowest value and should be read in its equivalent in Arabic numbers, in this case 2017. In this system a letter placed after another of greater value adds (thus XVII is 17) whereas a letter placed before another of greater value subtracts (thus XC is 90).

With this brief introduction, solve the following problems and state your answers in Roman Numerals.

1. $LVII + XLII =$

2. $CIV - LXIX =$

3. $CCC + CD + CM =$

4. $LXXV + XXXIX - LII =$

5. $CXI - XXXIV - LXXVI =$