ROMAN NUMERALS

Seven symbols are used to write any Roman numeral: I = 1, V = 5, X = 10, L = 50, c = 100, and D = 500. M = 1000. Sometimes an addition principle is used as in VI where V + I are added to make '6'. Sometimes the subtraction principle is used as in IV where V - I = 4. Sometimes addition and subtraction are use within the same number.

More than one symbol may be added like in VIII which means 5 + 1 + 1 + 1 = 8, but only one symbol is subtracted and the symbol is subtracted only from symbols nearest in value. The Roman numeral I is used with V or X in subtraction, but not with L, C, D, or M. fourty-nine is not IL, but XLIX. The Roman numeral 'L' is too great in value to be used with I for subtraction. Similarly X is used with L and C for subtraction but not with D and M.

Problem: | Write 350 in the Roman system |

Method: 1. Write the highest place symbol first.

2. Proceed to lower valued symbols.

Solve: 1. 300 can be written as CCC in Roman numerals, 50 is written as L.

2. Put the CCC and L together to make: CCCL Answer

TRY THESE:

1. Write 51 in Roman numerals.

2. Write 320 in Roman numerals.

3. Write 1992 in Roman numerals.

4. Write 549 in Roman numerals.

CHANGING ROMAN NUMERALS TO BASE TEN

Problem: | Give the decimal numeral for DCCIX |

Method: 1. Work from your left to your right to decide on the number of places the number will be by valuing the largest Roman symbol used.

2. Transfer the Roman symbol values into Base Ten numerals. Remember to write '0' in places not used.

Solve: 1. Since the DCC in the number above equals 700, the Base Ten number will be 3 places.

2. Putting the 700 with the IX value of '9', and a zero to hold the tens' place, the Base Ten number would be:

709 Answer

Note: A bar '—' over a Roman numeral increases its value 1000 times. $\overline{DCC}IX = 709,000$

TRY THESE:

1. MMDCC =

2. CCXLIX =

3. LXXXIX =

4. MDCC =

5. CML =

6. $\overline{CCC}$ =