INTRODUCTION TO LANGUAGES 8TH GRADE LATIN NUMBERS UNIT

Formation of Roman numerals:

NECESSARY EQUIVALENTS:

I.....1
V.....5
X.....10
L.....50
C.....100
D.....500
M.....1000
$\bar{}$.....Times 1,000

The other numerals are formed:

A. By adding to a numeral one or more numerals of equal or similar value after it: e. g. II....2; VII....7; CCLVIII....258

B. By subtracting from a numeral by placing a smaller numeral before it: e. g. IV....4; IX....9; XCV....95

C. A smaller numeral placed between two larger numerals subtracts from the following numeral: e. g. CCCXLV....345

Kinds of numerals:

A. Cardinal - determine quantitative value
B. Ordinal - determine rank or order

English and Latin Cardinals:	
one	ūnus, ūna, ūnum
two	duo, duae, duo
three	trēs, tria
four	quattuor
five	quīnque
six	sex
seven	septem
eight	octō
nine	novem
ten	decem

English and Latin ordinals:	
first	prīmus, a, um
second	secundus, a, um
third	tertius, a, um
fourth	quārtus, a, um
fifth	quīntus, a, um
sixth	sextus, a, um
seventh	septimus, a, um
eighth	octāvus, a, um
ninth	nōnus, a, um
tenth	decimus, a, um

Pensum A
Convert these Roman numerals to Hindu-Arabic numerals

_____XIX	_____CCLIV
_____XLII	_____MCDXXII
_____CVII	_____XLVIII
_____CDXLIX	_____DCCCLXXVIII
_____CCCXV	_____MCMXXXI
_____$\bar{X}\bar{C}$	_____$\bar{C}\bar{C}\bar{D}\bar{L}$
_____LXXXIV	_____XLII$\bar{D}$CCCXXXVII
_____DCCXIX	_____MCMLXXX
_____$\bar{D}$	_____$\bar{M}$

PENSUM B

Convert these Hindu-Arabic numerals to Roman numerals

_____17	_____49
_____32	_____990
_____78	_____109
_____7,442	_____348
_____5,496	_____655
_____200,000	_____12,500

PREFIXES AND ROMAN NUMERALS

Latin numerals are used in English as prefixes to thousands of words. The following exercise demonstrates to the student the value of possessing a knowledge of Latin numerals.

DIRECTIONS: Look up the following words in a dictionary.

UNUS (uni-)

uniaxial
unicameral
unicellular
unicycle
unify

DUO (du-)

duel
duet
duple
duplex
duplicate

TRES (tri-)

triangle
triaxial
trident
trienial

QUATTUOR (quat-, quad-)

quadrennium
quadricycle
quadrilateral
quadruple
quatrain

QUINQUE

quinquennial
quinquennium

SEX

sextuple
sextuplet
sexagenarian

SEPTEM (sept-, septem(n)-)

septet
septillion
September

OCTO (oct-, octo-, octa-)

octant
octagon
octopus

NOVEM

November
novena

DECEM

December
decenium

DIRECTIONS:

The following exercise is to demonstrate to the student the value of knowing the ordinal numbers in Latin. Hundreds of English words are derived from the Latin cardinal numbers. Look up the following English words from the dictionary and write by the following words a brief English definition. Realize how easy the meaning of English words become once we know the Latin numerals.

PRIMUS

primary
prime
pimer
primeval
primogeniture

SEXTUS

Sextant
sextet
sextillion

SECUNDUS

second
secondary

SEPTIMUS

TERTIUS

tertian
tertiary

OCTAVUS

octave

QUARTUS

quarter
quartet
quart

NONUS

Nonagenarian
nonagon
noon

QUINTUS

quintet
quintuple
quintillion

DECIMUS

decimal
decimate

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_____DCCXIX	_____MCMLXXX
_____$\bar{D}$	_____$\bar{M}$

III

The Romans limited the number of vertical lines *after* another number to *three.* However, inserting a vertical line *before* V meant that you wished to *decrease* that number by one. Hence: IV = (5 – 1) or four. They limited the number of vertical lines *before* another number to *one.*

The number ten was represented by two V's placed tip to tip to form an X. Of course by the addition/subtraction rule

Nine	= IX	(10 – 1)
Eleven	= XI	(10 + 1)
Twelve	= XII	(10 + 2)
Thirteen	= XIII	(10 + 3)
Fourteen	= XIV	(10 + (5 – 1))
Fifteen	= XV	(10 + 5)
Twenty-one	= XXI	(10 + 10 + 1), et cetera

When you think about it, this simple system is quite ingenious. It enabled the Romans to write all of the numbers from 1 to 40.

To continue, the Romans added other letters. From Greek, they took the letter L to represent fifty. The number forty can be written with four X's:

Forty = XXXX (10 + 10 + 10 + 10) or
XL (50 – 10)
Sixty = LX (50 + 10)
Seventy = LXX (50 + 10 + 10), et cetera.

The number one hundred is represented by the letter C, the first letter of the Latin word for one hundred, ***Centum.*** For one thousand, the Romans used the first letter of ***Mille,*** Latin for one thousand. Five hundred was represented by the letter D, probably from ***Demi-mille*** or one-half of one thousand. More complicated numbers could be formed by putting the letters next to each other and adding and subtracting:

MCDXLII = 1000 + (500 – 100) + (50 – 10) + 2 = 1442

a) Before you begin doing the exercises that follow, go back to page XIV and fill in the Arabic equivalents of all of the Roman numerals.
b) Now go back to page XIII and write out the problem and its answer in Arabic numerals, then translate your answer into Roman numerals as well.