

Number Theory Introductory Lesson

The Indo-Arabic (aka Hindu-Arabic) System

A) The two numbers below have the same value, but one is written in Roman Numerals, and one is written in the Hindu-Arabic system. What similarities and difference do you notice?

CCCLXXXVIII

388

B) Characteristics of the Hindu-Arabic System:

1)

2)

C) Write the following numbers in expanded notation:

1) 388

2) 1452

3) 1030

D) Values

1) What is the value of 9 in 1956?

2) What is the value of 3 in 8732?

E) Do the following operations BY HAND as you normally would. Show all steps.

1) $1289 + 723$

2) $12013 - 9684$

3) 456×123

4) $5940 \div 45$

F) Alternative Algorithms

Alternative Algorithms (continued)