

Narahari's Spelling and Math GURUCOOL

STRIVING TOWARDS

Excellence in SPELLING. Excellence in MATH

July 2012 Math Gurucool Newsletter

The July newsletter and lessons from Math Gurucool give you a fresh set of lessons and problems. Here's what we will learn this month:

- 1) Senior and middle divisions (Grades 4 to 8) will learn about prime factorization and divisibility tricks. (See lessons for further instructions)
- 2) Junior division (Grades 1 to 3) will learn how to add numbers with multiple digits

The study packet for July contains the following:

- 1) The lessons explain the concepts we are learning this month with step-by-step instructions. Each lesson also contains examples and sample problems to illustrate the problems.
- 2) The July problem set contains problems that are intended to challenge you.
- 3) The solution set contains step-by-step illustrations and explanations as to how to approach and solve the problems.

A *numeric palindrome* is a number that reads the same backwards and forward (e.g. 13431)

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Problem of the month: (Grades 1-3)

A palindrome is a number that reads the same forwards and backwards. Jack picked the smallest two digit palindrome and Jill picked the largest two digit palindrome. They added the two numbers and called the sum K. Humpty added a one-digit number to K and made a palindrome. What is the final palindrome?

Problem of the month: (Grades 4-8)

How many five-digit multiples of 11 are there whose digits add up to 30?

Did you know?

40 is only number that has each of its *letters written in alphabetical order*. See for yourself! F-O-R-T-Y. The number 1 also shares a similar quality. It's the only number that has its *letters in reverse alphabetical order*! O-N-E.

Zero is an important number in mathematics. The history of zero is an interesting area of study.

NSM GURUCOOL

Coaching and guidance by
Narahari Bharadwaj in Math, Spelling

History of Mathematics

- It is believed that Ancient Egyptians knew about complex mathematical topics such as algebra, arithmetic and geometry as far back as 3000 BC.
- Babylonians measured the circumference of a circle as approximately 3 times the diameter, which is fairly close to today's measurement which uses the value of Pi (around 3.14).
- Much of today's mathematical knowledge was explored by Greek mathematicians such as Pythagoras, Euclid, and Archimedes during the 7th century BCE. This era produced many of the most fundamental theories.
- The Hindu-Arabic numeral system was initiated as early as the 1st century and a full system was established around the 9th century, forming the basis of the numerical digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 that we use today.



Babylonian tablet of Pythagorean triples

Thanks,
NSM Gurucool

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