

### Mahatma Gandhi's 143rd Palindrome Birthday is Special

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"Father of India" Mahatma Gandhi was born on October 2, 1869 and Tuesday, October 2, 2012 marks his 143rd birthday. Gandhi's 143rd birthday possesses special numerical properties. Why? I will explain.

First, using the day-month-year date format, the full date of October 2, 2012 expressed as 2-10-2012, or simply 2102012 is a palindrome day. This is a unique coincidence because after this year Gandhi's next such palindrome birthday will occur 1000 years later, on 2103012 (October 2nd, 3012).

Next, a fascinating numerical connection exists between Gandhi's new age, 143, and his palindrome birthday 2102012. Here is how. First, 143 plus its reverse (341) yields 484, a palindrome number. Second, split 143 as 1 and 43 and add 1 and subtract 43 from 143 resulting in 101, another palindrome number. (Interestingly enough, if numbers are assigned to the letters in the English alphabet as A = 1, B = 2, etc., the numbers assigned to the letters of "Gandhi" add up to 43. In addition, the sum of the numbers assigned to the letters of "Satyagraha" (insistence of truth, nonviolent resistance coined and developed by Gandhi) yields 101.) So, numbers 484, 1, 43 and 101 are all derived from 143 using elementary arithmetic. Now, go ahead and multiply these four numbers and see what comes out:  $484 \times 1 \times 43 \times 101 = 2102012!$  Isn't this amazing, like magic? Wait, there is more.

If 143 is split as 14 and 3,  $14 + 3 = 2 + 3 + 5 + 7$ , that is, the sum of the first four prime numbers. It turns out the product of these first four primes results in 210 (representing October 2nd), four times the sum of the cubes of the same four primes yields 2012 (this year), and guess what, 210 and 2012 put side-by-side constitute Gandhi's 143rd palindrome birthday 2102012! Wow!

Lastly, if 143 is split as 14 and 3, the difference of the squares of these two numbers results in 187. On the other hand, if 143 is split as 1 and 43, 43 times the sum of 1 and 43 yields 1892. Go ahead and multiply 1892 with the difference of 1892 and reverse of 187, what comes out? (2102012!) Unbelievable! (Note that 1892 minus 781 equals 1111, a palindrome number. In addition, interestingly enough, half of sum of 210 and 2012 also equals 1111.)

Happy 143rd palindrome birthday, Mahatma Gandhi and let peace live with you forever!

P.S. As an aside, note that the numbers assigned to the letters of "Mahatma Gandhi" add up to 100.

