

### Happy 95th Birthday, Nelson Rolihlahla Mandela!

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South African anti-apartheid revolutionary and former President Nelson Rolihlahla Mandela was born on Thursday, July 18, 1918 and this Thursday, July 18, 2013 will mark his 95th birthday. In his honor, I constructed the following numerical birthday brainteasers as a birthday gift for him.

1. Mandela's current age 94 is special because it underscores the 94th year of the 20th Century (that is, 1994) when Mandela became the President of South Africa.
2. In addition, one less than twice 94 yields 187, his birth date, 18 July.
3. Also, this year's number 2013 equals  $33 \times 61$  where 33 plus 61 equals 94.
4. The full date number of Mandela's 95th birthday can be expressed as 18-7-2013, or simply, 1872013. This date will also be the first day of the 96th year in Mandela's life. Interestingly enough, 1872013 equals  $11 \times 13 \times 13 \times 19 \times 53$  where the sum of the prime factors 11, 13, 19 and 53 equals 96! In addition, if numbers 1 to 26 are assigned to the letters of the English alphabet in alphabetical order as A being 1, B being 2, etc., the sum of the numbers assigned to the letters of Mandela's birth name, "Rolihlahla" coincides with 96! Wow!
5. Also, reverse of Mandela's new age 95 is 59, a prime number. Interestingly enough, prime 59 and the next two primes 61 and 67 add up to Mandela's birth date 187.
6. Mandela's 96th birthday in 2014 will also be special since 96 represent his birth name, "Rolihlahla!"
7. Mandela's 97th birthday in 2015 relates to his name "Nelson" because reverse of 97, which is 79, equals the sum of the numbers assigned to the letters of "Nelson."
8. Mandela's 98th birthday in 2016 is also special because 98 represent two of the alternating digits of Mandela's birth year, 1918. Also, 18 July is the 200th day of 2016 where  $200 = 4 \times 50$  where 50 equals the sum of the numbers assigned to the letters of "Mandela."
9. Mandela's 99th birthday in 2017 will also be unique since twice 99 plus one yields 199 and coincidentally, the 199th day of 2017 is Mandela's birth date, 18 July!
10. Mandela's 100th birthday in 2018 is also special since 100 is twice 50 where 50 equals the sum of the numbers assigned to the letters of "Mandela." In addition, twice 100 minus one result in 199 and again, the 199th day of 2018 is his birth date, 18 July!

Happy 95th birthday, Nelson Rolihlahla Mandela!

#### My other numerical observations about Mandela's life and his other birthdays:

- Mandela's 18th birthday in 1936 written as 1871936 is special because 1936 equals twice the sum of 187 and its reverse, 781.
- Mandela's 50th birthday expressed as 1871968 is divisible by his birth year 1918.
- Mandela's 75th birthday written as 1871993 is divisible by 199, representing the 199th day of 1993, July 18th.
- His 76th birthday written as 1871994 is also unique because 1994 equals the sum of 1807 (representing 18th of July) and 187 (also representing 18 July).
- Mandela's 81st birthday expressed as 1871999 is divisible by 991, which is reverse of 199.
- Mandela's 82nd birthday expressed as 1872000 is unique because it is divisible by 96, 225, and 50 where these three numbers coincide with the sum of the numbers assigned to the letters of

his birth name, "Rolihlahla," his full name, "Nelson Rolihlahla Mandela," and his last name, "Mandela."

- Mandela's 100th birthday expressed as 18072018 is interesting because its reverse 81027081 equals  $3 \times 3 \times 3 \times 3001003$  where 3001003 is a palindrome prime.
- Mandela's 134th birthday written as 1872052 is divisible by 1807 (that is, July 18th).
- Mandela's 139th birthday expressed as 1872057 is divisible by 781, which is the reverse of 187.
- If the day numbers in each calendar year are counted backwards (December 31 being one, December 30 as two, December 29 as three, etc.), Mandela's birth date 18 July falls on the 167th day of each year. Interestingly enough, 167th prime number is 991 where reverse of 991 is 199, representing the 199th day of each non-leap year, July 18th!
- The leftmost three digits of all the years Mandela served as President of South Africa is 199!
- The sum of the numbers assigned to the letters of the word "anti-apartheid" equals 126 and interestingly enough,  $126 = 18 \times 7!$