

Happy 91st Birthday Jimmy Carter and Hope You Get Well Soon

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President Jimmy Carter (birth name James Earl Carter, Jr., born on October 1, 1924, in Plains, Georgia) served as the 39th President of the United States between 1977 and 1981 [1]. In 1982, he established the Carter Center to participate in initiatives including monitoring international elections, fighting third world diseases and seeking international peace. President Carter received the Presidential Medal of Freedom (highest honor for an American civilian) in 1999 and won the Nobel Peace Prize in 2002.

Last August, President Carter announced that his recent liver surgery revealed that he has cancer in other parts of his body and that he will undergo treatment. I was saddened by this news because I always admired President Carter for his decency and particularly, his lifelong commitment to humanity and genuine efforts to achieve peace all over the world.

This week, Thursday, October 1, 2015 marks President Carter's birthday and he will turn 91. On this occasion, I constructed the following numerical brainteaser birthday gift for him:

1. There is a secret code hidden in President Carter's birthday. How so? President Carter was born on 10-01-1924 or simply, 10011924. Split this number into numbers 1001, 1, and 924, and subtract the reverse of 924 (429) from 1001, yielding 572. The reverse of 572 is 275 and further subtracting 1 from 275 gives 274. What is the 274th day of 2015? (Answer: President Carter's 91st birthday, October 1st!) What is the 275th day of any leap (e.g., 2016)? (Answer: Again, October 1st.)
2. If numbers 1 to 26 are assigned to the letters of the English alphabet as A being 1, B is 2, C = 3, etc., the numbers assigned to the letters of "Jimmy" and "Carter" each add up to 70 and 65 respectively, and 70 plus 65 yields 135, a number representing "Jimmy Carter." Note that President Carter's 91st birthday coincides with the 274th day of 2015 where 274 equals 2 times 137 and interestingly enough, these two primes differ by 135 ("Jimmy Carter").
3. President Carter was born on the 275th day of 1924. If 275 is split as 27 and 5, the product of these two numbers yield 135 ("Jimmy Carter"). Also, the product of the digits of 275 yields 70, which coincides with the sum of the numbers assigned to the letters of "Jimmy."
4. President Carter's birth day October 1st expressed as 1001 is a special palindrome number which equals the product of three consecutive primes, $7 \times 11 \times 13$. Interestingly enough, digit 7 is the fourth prime number and if one replaces 7 with 4, $4 \times 11 \times 13$ yields 572, with reverse 275 (Carter was born on the 275th day of 1924). In addition, President Carter's new age 91 equals palindrome 1001 divided by palindrome 11, where 11 equals the sum of the left and right halves of 1001. Also, 11 represent the number of letters in "Jimmy Carter."
5. The numbers assigned to the letters of "James Earl Carter, Jr." (President Carter's birth name) add up to 177, which equal 3×59 . Interestingly enough, one-third of 531 (the reverse of 135

representing “Jimmy Carter”) also equals 177. Also, primes 3 and 59 differ by 56, the reverse of which is 65, representing “Carter.”

6. The reverse 1924 (President Carter’s birth year) equals $4291 = 7 \times 613$, where primes 7 and 613 differ by six times 101, and if 101 is interpreted as 10-1, it represents Carter’s birth date, October 1st.
7. President Carter’s 39th birthday in 1963 written fully as 10011963 was special because if split as 10, 01, 19, and 63, these four numbers add up to 93, which is the reverse of 39 (Carter served as the 39th President of the United States).
8. President Carter’s 74th birthday in 1998 was special: First, the prime factors of 74 (2 and 37) add up to 39. Second, if 1998 is split as 19 and 98, these two numbers add up to three times 39. Third, 1998 is three times 666, which equals the sum of 135 (“Jimmy Carter”) and its reverse, 531.
9. President Carter’s 78th birthday in 2002 written as 10012002 was also special: First, the right half of 10012002 equals twice its left half (that is, $2002 = 2 \times 1001$). Second, 78 equal twice 39.
10. President Carter’s 87th birthday in 2011 was also special: First, if 2011 is split as 20 and 11, these two numbers add up to 31, which equals 7 plus 11 plus 13, the product of which is $7 \times 11 \times 13 = 1001$. Second, 1102 (reverse of 2011) equals 1001 (representing October 1) plus 101 (also October 1, if interpreted as 10-1).
11. President Carter’s 90th birthday last year was also special since 90 equal the sum of the squares of the digits of 39. In addition, the prime factors of 2014 add up to 74, and the prime factors of 74 add up to 39.
12. President Carter’s 91st birthday this week expressed as 10012015 is also special because its digits add up to 10, which equals the difference of the prime factors of 39 (which are 3 and 13).
13. President Carter’s 92nd birthday will also be interesting since if 2016 is split as 20 and 16, 20 plus 16 equals 36, which equals the sum of the numbers assigned to the letters of “Earl.” In addition, 2016 equals 36 times 56 where the reverse of 56 (which is 65) represents “Carter.”
14. President Carter’s 93rd birthday will also be special: First, number 93 is reverse of 39. Second, one-third of 93 equal 31, which equal the sum of primes 7, 11, and 13. Third, if date 10012017 is split as 10, 01, 20, and 17, these four numbers add up to 48 (“James”).
15. President Carter’s 96th birthday expressed as 10-1-2020 or simply, 1012020 will be special since 2020 equal 20 times 101. Also, 96 equal twice 48 (the sum of the numbers assigned to the letters of “James”).
16. President Carter’s 101st birthday in 2025 will also be special: First, 101 interpreted as 10-1 represents Carter’s birth date, October 1. Second, 2025 equals 15×135 , where 135 represent “Jimmy Carter.”
17. President Carter’s 110th birthday to occur in 2034 will be special since 2034 is six times the sum of the squares of primes 7, 11, and 13, where $7 \times 11 \times 13 = 1001$. Also, if date 10012034 is split as 10, 01, 20, and 34, these four numbers add up to 65 (“Carter”).
18. President Carter’s 112th birthday expressed as 10-1-2036 or simply, 1012036 will be a perfect square date since 1012036 equals 1006×1006 . Also, 112 equals twice 56, which is the reverse of 65 (“Carter”).

Happy 91st birthday, President Jimmy Carter and I hope you will get well soon so that you can continue your true leadership to make our world more safe and peaceful.

[1] Jimmy Carter, Wikipedia

https://en.wikipedia.org/wiki/Jimmy_Carter