Happy 65th Birthday, Elton John!

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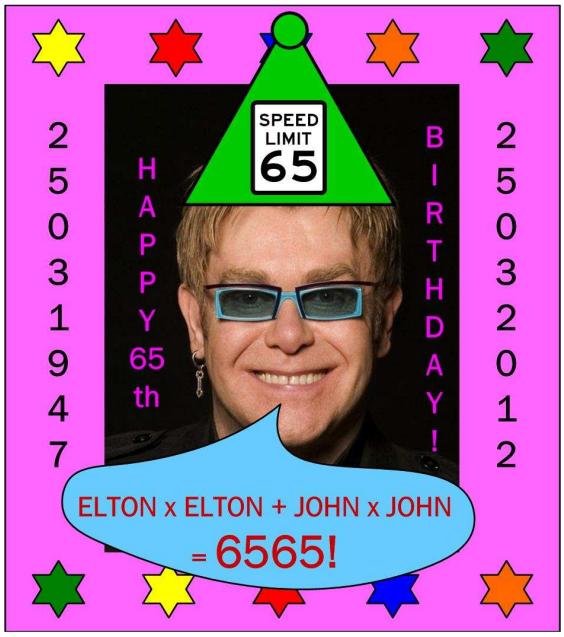

Today, Sunday, March 25, 2012 marks famous singer, songwriter, composer and pianist Elton John's 65th birthday. He was born on March 25th, 1947 in England where the calendar dates are expressed in day-month-year date format. As I was looking at numbers related to Elton's life, I discovered that Elton's 65th birthday possesses *numerically* special properties. Here is why:

1. Elton's 65th birthday's full date number is 03252012 in month-day-year date format and 25032012 in day-month-year date format. Let us go ahead and split 03252012 in the middle into numbers 0325 and 2012 (or 2503 and 2012). It turns out 2012 equals 4 x 503, that is, the prime factors of 2012 are 2 and 503. Are you with me so far? Now, put these two prime numbers side-by-side as 2503, what does this number correspond to? (It is 25 March in day-month format.) Next, what comes out if the leftmost and rightmost two digits of number 2503 are switched? (Number 0325 which correspond to March 25th in the month-day date format.) Isn't this neat?

2. Next, consider Elton's full birth date expressed as 03251947 (or 25031947 in day-month-year date format). If this number is split as 03, 25, 19 and 47, these four numbers add up to 94. Interestingly enough, the sum and the difference of the digits of 94 are 13 and 5, and guess what, 13 times 5 equals to Elton's new age (65)!

3. If numbers are assigned to the letters of name "ELTON JOHN" using the English alphabet as A = 1, B = 2, ..., Z = 26, the letters of "ELTON" add up to 66 (which equals the sum of the leftmost and rightmost two digits of 1947, that is, 19+47) and the letters of "JOHN" add up to 47 (that is, the rightmost two digits of 1947). Wow! Okay but what does this have to do with Elton's 65th birthday?" Okay, go ahead and add the squares of "ELTON" and "JOHN" (that is, 66x66+47x47), what is the result? (Double 65's side-by-side!) Doesn't this make Elton's 65th birthday more special?

4. Also, the reverse of twice the difference of numbers 19 and 47 (which make up 1947) yields 65!

5. In addition, the difference of the squares of numbers 65 (Elton's new age) and 56 (which is reverse of 65) yields 1089 which is 33x33 and interestingly enough, two 33's add up to "ELTON"!

6. If number 2503 (25 March) is split as 25 and 03 (or 0325 (March 25) is split as 03 and 25), the reverse of twice the sum of these two numbers also yield 65!

7. If 25 March is expressed as 253 (instead of 2503), this number equals 11 times 23 and the squares of these two prime numbers add up to ten times 65! Similarly, if March 25th is written as 325 (or 0325), this number equals five times 65!

8. As an aside, Elton's 66th birthday to occur next year will also be numerically special, why? Multiply "ELTON" with "JOHN" and reverse the result, what comes out? (2013!) Amazing! Note also that Elton's 2013 birthday number (66) correspond to his name "ELTON"! In addition, if 2013 is split in the middle into numbers 20 and 13, double the sum of these two numbers yields "ELTON"! Also, 2013 equals 3 x 11 x 61 where the difference between the last prime and the sum of the first two primes equals "JOHN" (47)! Also, 2013 equals 33 x 61 where 33 plus 61 yields twice "JOHN"!

9. Elton's 100th birthday will occur in 2047 which equals 23x89. Interestingly enough, the difference between these two prime numbers also yields "ELTON"!

10. Elton's 200th birthday to occur in 2147 is also special since 2147 equals the difference of the squares of "ELTON" and "JOHN" (that is, 66x66–47x47=2147)!

Based on my findings listed above, Elton's 65th birthday indeed possesses interesting numerical properties which make it unique.

Thanks Elton John for all the wonderful music you produced over the years and have a happy 65th birthday!

Aziz S. Inan is a professor of electrical engineering teaching at University of Portland for 23 years. As a hobby, he enjoys finding interesting numerical properties associated with numbers, connections and coincidences between numbers, calendar dates, birthdays, historical dates, etc. He can be reached at 503-943-7429 or ainan@up.edu. (Note that the purpose of this article is solely recreational and for fun.)