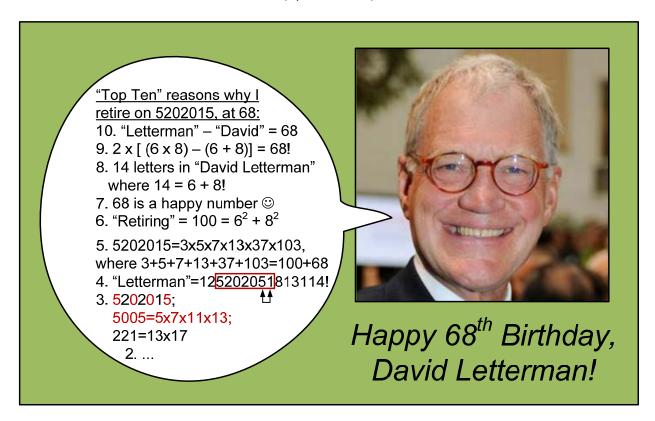
Top Ten Numerical Reasons Why David Letterman Decided to Retire at 68

(Aziz S. Inan, Ph.D., Professor, Electrical Engineering, University of Portland, Portland, Oregon)
(April 12, 2015)



American late night CBS Television Network LATE SHOW host David Letterman (born April 12, 1947) turns 68 this weekend [1-3], on Sunday, April 12, 2015. This is going to be his last birthday before he hosts his final broadcast of the LATE SHOW on May 20, 2015 after which he retires. It got me thinking as to why Letterman decided to retire at 68. And particularly why 5-20-2015 is the final date of his last show? After a little investigation, I came to the conclusion that it is these "Top Ten" numerical reasons why Letterman made this decision:

- 1. Number 68 is numerically "hidden" in Letterman's name. How? If numbers 1 to 26 are assigned to the letters of the English alphabet, the numbers assigned to the letters of "David" and "Letterman" each sum up to 40 and 108, and these two numbers differ by 68.
- 2. Number 68 has a unique property: Twice the difference of the product and the sum of the digits of 68 yield back 68.
- 3. In addition, the digits of Letterman's new age (68) add up to 14, the number of letters that make up his name.
- 4. Also, 68 is a happy number [4], since 6x6+8x8=100 and 1x1+0x0+0x0=1.
- 5. The prime multipliers of 68 (2, 2 and 17) add up to 21, which signifies the 21st century. 21 also equal the sum of the digits of Letterman's birth year, 1947.
- 6. If 68 is split into digits 6 and 8, the sum of the squares of these two digits yield 100. Interestingly enough, 100 also equals the sum of the numbers assigned to the letters of "Retiring!"

- 7. Letterman's retirement day is set for May 20, 2015, or 5202015. May 20th is the 140th day of this year where the prime factors of 140 (which are 2, 5, and 7) add up to 6+8, the sum of the digits of Letterman's retirement age, 68.
- 8. In addition, Letterman's retirement date 5202015 is embedded in his last name. How? If the letters in "Letterman" are replaced by numbers put side by side as 125202051813114, switching the places of the 8th and 9th digits of this 15-digit number (where 8 and 9 put side by side make 89, which is half a circle rotation of 68) yields 125202015813114. Can you see 5202015 embedded in this number? (Note that 15 also equal the sum of the digits of 5202015.)
- 9. The prime factors of the date of Letterman's retirement date 5202015 (which are 3, 5, 7, 13, 37, and 103) add up to 168, which equal 100 $(6^2 + 8^2)$ plus 68.
- 10. Lastly, if Letterman's retirement date 5202015 is split into its odd- and even-numbered digits as 5005 and 221, 5005 equals the product of four consecutive primes, 5 x 7 x 11 x 13, and 221 is the product of two consecutive primes, 13 x 17. So, date 5202015 can be produced from the five consecutive primes 5, 7, 11, 13 and 17 by simply using multiplication. Isn't this fun?

Based on the "Top Ten" reasons listed above, I am totally convinced as to why Letterman chose to retire on May 20, 2015. Happy 68th birthday, David Letterman, and you will definitely be missed!

[1] A. S. Inan, "Anything Special About David Letterman's 67th Birthday?" April 16, 2014. http://faculty.up.edu/ainan/TopTenBirthdayBrainteasersDavidLetterman2014.pdf
[2] A. S. Inan, "2013 Top Ten Birthday Brainteasers for David Letterman," April 12, 2013. http://faculty.up.edu/ainan/DavidLetterman66thBirthday4122013.pdf
[3] A. S. Inan, "Top Ten Birthday Brainteasers for David Letterman," April 12, 2013.

[3] A. S. Inan, "Top Ten Birthday Brainteasers for David Letterman," April 12, 2012. http://faculty.up.edu/ainan/TopTenBirthdayBrainteasersDavidLetterman2012.pdf

[4] Happy number, Wikipedia

http://en.wikipedia.org/wiki/Happy number

Aziz S. Inan is a professor of electrical engineering teaching at University of Portland for 26 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.)