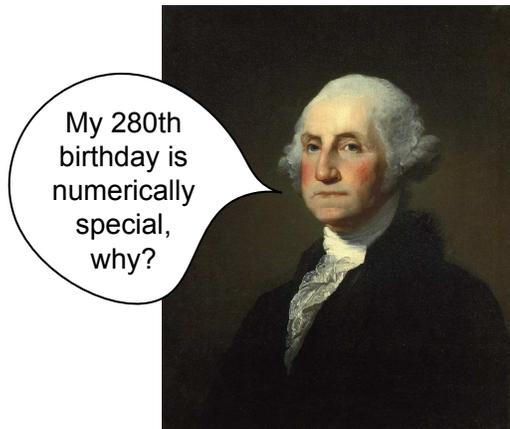


George Washington's 280th Birthday is Numerically Special

(Aziz S. Inan, Ph.D., Electrical Engineering, University of Portland, Portland, Oregon)
(February 14, 2012; Updated on February 20, 2012)



George Washington
(February 22, 1732-December 14, 1799)

The first President of the United States, George Washington, was born on February 22, 1732 (2-22-1732 or simply, 2221732) and died on December 14, 1799 (12141799), at age 66. This year February 22nd, 2012 (2222012), which marks Washington's 280th birthday, is numerically special. Here is why.

Note that Washington's full birth date 2221732 can be broken into its prime factors as $2 \times 2 \times 71 \times 7823$ where 7823 happens to be the 989th prime number. The digits of 989 add up to 26 and square of 26 times 3287 (which is the reverse of 7823) results in 2222012, that is, the full date number of Washington's 280th birthday! Isn't this amazing, like a magic trick? In addition, $989 = 23 \times 43$ where the sum of these two prime numbers is 66, Washington's death age!

Further, if Washington's 280th birthday 2222012 is expressed in terms of its prime factors as $2 \times 2 \times 13 \times 13 \times 19 \times 173$, these six prime numbers add up to 222, which represents February 22nd, fascinating! Also, the difference of the reverses of the two bigger prime factors 19 and 173 yield 280, wow!

Lastly, as an aside, Washington's 490th birthday to occur in 2222 will be one-of-a-kind since its full date is 2222222! In addition, his 488th birthday expressed as 2222220 is unique because it's divisible by the first six consecutive prime numbers.

Happy 280th birthday, George Washington!

Aziz Inan has been teaching at University of Portland for the past 23 years. He can be reached at 503-943-7429 or ainan@up.edu.