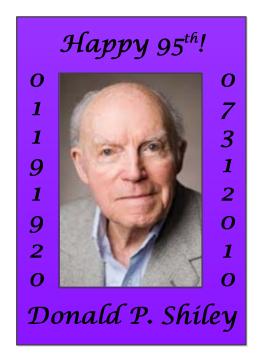<u>Happy 95th Birthday, Donald P. Shiley!</u>
(Aziz S. Inan, Professor, Donald P. Shiley School of Engineering, University of Portland, Portland, Oregon)
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Donald P. Shiley was born on January 19, 1920 (01-19-1920, or simply, 1191920) and died on July 31, 2010 (07312010), at age 90 [1-4].

This Monday, January 19, 2015 (1192015) marks Mr. Shiley's 95th birthday and I constructed the following numerical brainteasers to celebrate his upcoming birthday:

1. The sum of the digits of Donald Shiley's 95th birthday expressed as 1192015 equals 19, which is one fifth of 95.
2. In addition, number 19 holds a special place in Donald Shiley's life. Why? First, 19 is the day number of his birthday. Second, 19 also correspond to the leftmost two digits of his birth year. Third, the rightmost two digits of his birth year, 20, can be thought of as 1 plus 19, where 1 and 19 put side by side make 119, that is, his birth date January 19. Fourth, 20 equal the sum of the prime factors of 91 (7 and 13), which is the reverse of 19. Fifth, Mr. Shiley died during the 91st year of his life where reverse of 91 is 19.
3. If Mr. Shiley's 95th birthday 1192015 is split as 1, 19, 20 and 15, these four numbers add up to 55. Interestingly enough, the sum of the prime factors of the sum of the squares of the digits of 95 also equals 55.
4. Donald Shiley turns 95 in 2015 and these two numbers have an interesting connection. The difference between the prime factors of the reverse of half of the reverse of 2015 yields 95. Wow!
5. If Mr. Shiley's full birth date 1191920 is split as 1, 19, 19 and 20, the reverse of the sum of these four numbers also yield 95.
6. If Mr. Shiley's birth year 1920 is split in the middle as 19 and 20, one fourth of the product of these two numbers also results in 95.

7. If numbers 1 to 26 are orderly assigned to the letters of the English alphabet (A being 1, B is 2, etc.), the reverse of the sum of the numbers assigned to the letters of Mr. Shiley's wife's name "Darlene" also equals 95.
8. Mr. Shiley's birthday number X in any year 201A between 2010 and 2019 always equals 9A (that is, the leftmost digit of X is 9 and its rightmost digit is A). For example, he turns 95 in 2015.
9. Donald Shiley's new age 95 has an interesting numerical property: 1x95=19x5!
10. Mr. Shiley's birth date January 19 can be expressed as 119. The reverses of the prime factors of 119 add up to 78 coinciding with the rightmost two digits of 1978, the year when Mr. Shiley married Darlene Shiley. In addition, the reverse of 78 (i.e., 87) corresponds to the sum of the numbers assigned to the letters of "Shiley."
11. Mr. Shiley's birth year 1920 can be expressed in terms of the first four prime numbers. How? $1920 = 2^7$ x 3 x 5! Isn't this fun?
12. Next year (2016) will mark Donald Shiley's 96th birthday where 96 can be expressed in terms of the first three prime numbers as $96 = 2^5$ x 3.

Happy 95th birthday, Donald P. Shiley!

[1] A. S. Inan, "Happy Birthday, Donald P. Shiley," *Upbeat*, University of Portland, Portland, Oregon, January 13, 2014.
http://wordpress.up.edu/upbeat/happy-birthday-donald-p-shiley/
[2] A. S. Inan, "Donald P. Shiley's Birthday," *Upbeat*, University of Portland, Portland, Oregon, January 14, 2013.
http://wordpress.up.edu/upbeat/donald-p-shileys-birthday/
[3] A. S. Inan, "Aziz Inan Celebrates Donald P. Shiley's 93rd "Birthday"," posted on *Donald P. Shiley School of Engineering* website, University of Portland, Portland, Oregon, January 18, 2012.
http://www.up.edu/shownews.aspx?id=4732
[4] A. S. Inan, "Numbers add up for Donald Shiley," *The Beacon*, Vol. 112, Issue No. 14, p. 12, University of Portland, Portland, Oregon, February 3, 2011.
http://upbeacon.com/2011/02/03/numbers-add-up-for-donald-shiley/