Brainteasers to Celebrate Donald P. Shiley's 96th Birthday

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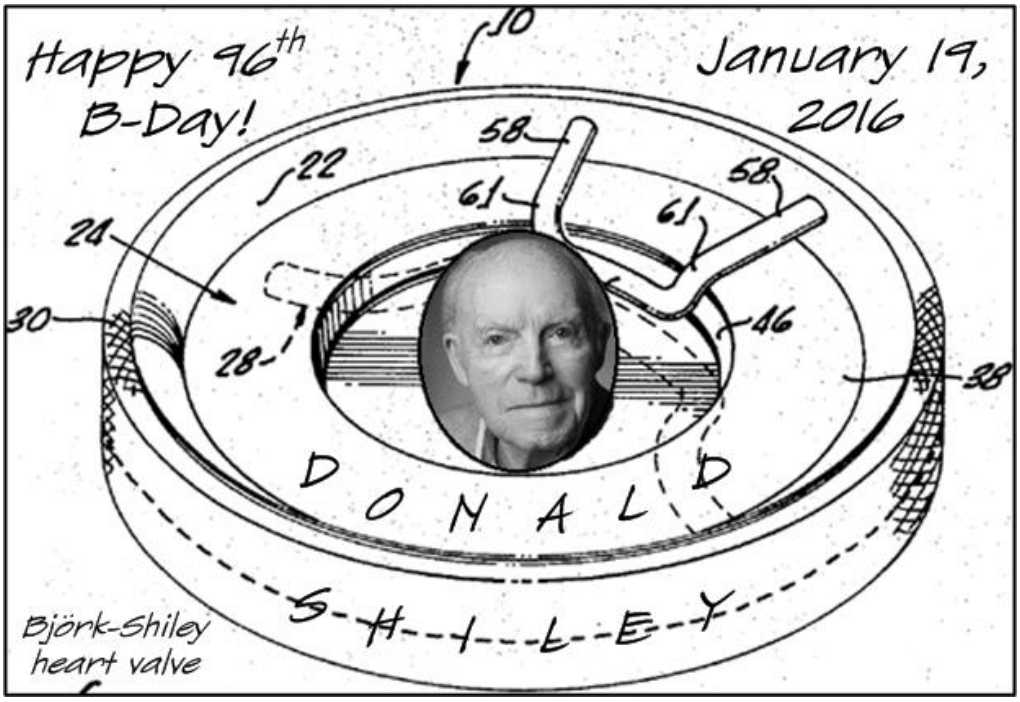

Donald Pearce Shiley was born on January 19, 1920 and died on July 31, 2010, at age 90. If he was still alive, he would have turned 96 this Tuesday, January 19, 2016. To remember this honorable man and to celebrate his birthday, I prepared the following brainteasers:

1. Mr. Shiley's new age 96 equals half of the leftmost three digits of his birth year 1920, that is, 192/2=96. Also, 96 times the reverse of the sum of the digits of 1920 yields 2016. Further, if Mr. Shiley's 96th birthday is expressed as 1-19-2016, or simply as 1192016, this date equals 2^4 x 7 x 29 x 367. Note that the prime factors of 1192016 add up to 2 + 7 + 29 + 367 = 405 and four times reverse of 405, namely 504, yields back 2016.
2. Mr. Shiley's 97th birthday to occur in 2017 will be special because the sum of 97 and its reverse, namely 79, add up to 176. Coincidentally, if numbers 1 to 26 are assigned to the letters of the English alphabet, A as 1, B as 2, C as 3, etc., the sum of the numbers assigned to the letters of *Donald Pearce Shiley* also equals 176. Also, note that 97 and 2017 are both prime numbers. Moreover, the reverse of Mr. Shiley's birth year, namely 0291, equals three times 97.
3. If Mr. Shiley's 98th birthday expressed as 1192018 is split as 1, 19, 20, and 18, the sum of these is 58 where the reverse of the sum of the squares of the digits of 58 give 98. In addition, the square of the sum of the digits of 58 is 169 where the 169th prime number, namely 1009, times 2 results in 2018. Also, if Mr. Shiley's 98th birthday written as 1192018 is split into its even- and odd-numbered digits as 1908 and 121 where 121 is 11 x 11, 1908 + 121 – 11 = 2018. Moreover, the sum of the digits of 1192018 equals 2 x 11 where 11^2 =121. Furthermore, 1908 equals 9 times 212. Note that Mr. Shiley died on the 212th day of 2010 which was July 31, 2010.

4. Mr. Shiley's 99th birthday expressed as 1192019 will be very special because switching numbers 20 and 19 on the right side of 1192019 yields his birth date, 1191920. Also, if split as 1, 19, 20, and 19, these add up to 59 which equals the sum of the numbers assigned to the letters of his wife *Darlene*. Furthermore, the sum of the numbers assigned to the letters of *Darlene Shiley* equals 137 and the reverse of 137, namely 731, represents July 31, the day Mr. Shiley died in 2010.
5. If Mr. Shiley's 100th birthday expressed as 01192020 is split as 0119 and 2020, one third of their sum yields 713. Interestingly enough, reverse of 713, namely 317, represents 31 July in the day-month calendar date format. In addition, if split as 01, 19, 20, and 20, the sum of these numbers is 60, which also is the sum of the numbers assigned to the letters of Mr. Shiley's wife Darlene Shiley's maiden name *Loran*. Additionally, note that July 31 written in month-day date format as 731 equals 17 x 43 where these prime factors add up to 60 too. Also, reverse of 01192020 equals 10 x 283 x 717 where the sum of these three numbers is half of 2020.
6. Mr. Shiley's 101st birthday to occur in 2021 will also be special since the reverse of 2021, namely 1202, equals 911 plus 0291 where the reverses of these two numbers, namely 119 and 1920, put side by side yield Mr. Shiley's birth date, 1191920, that is January 19, 1920. Also, 2021 equals 43 x 47, where the sum of these primes is 90, the age at which Mr. Shiley died.

Thanks for your generosity Donald and Darlene Shiley and happy 96th birthday!