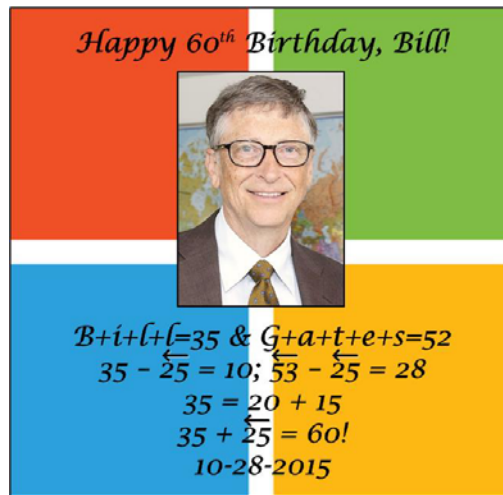


Happy 60th Birthday, Bill!

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Bill Gates turns 60 today. To celebrate Bill's birthday, I constructed the following numerical birthday brainteasers and I hope he will enjoy reading them:

If numbers 1 to 26 are assigned to the letters of the English alphabet as A being 1, B is 2, C equals 3, etc., the sum of the numbers assigned to the letters of "Bill" and "Gates" equal to 35 and 52, respectively. Interestingly enough, using these two numbers, their digits and basic arithmetic, one can construct Bill's 60th birthday, October 28, 2015, expressed as 10-28-2015. How so?

First, the difference between 35 and the reverse of 52 (25) equals 10 which is Bill's birthday's month number.

Second, the reverse of 35 (53) minus the reverse of 52 (25) yields 28, the day number of Bill's birthday.

Third, 35 equal 20 plus 15, where 20 and 15 side by side make 2015. Also, note that the prime factors of 20 and 15 each is a subset of prime numbers 2, 3 and 5 which make up the digits of 35 ("Bill") and 52 ("Gates").

Further, the sum of 35 and the reverse of 52 (25) gives Bill's new age, 60.

Note that 35 and 52 are made of prime digits 3, 5, 5, and 2, and a simple arithmetic operation among these digits given by $3 \times (5 + 5) \times 2$ also yields 60.

Additionally, prime digits 2, 3, and 5 are the prime factors of 60.

Lastly, if 2015 is reversed to yield 5102 and if 5102 is split as 5, 10 and 2, arithmetic operation $(5 \times 10 + 2)$ yields 52, representing "Gates".

Happy 60th birthday, Bill!