

## Ten Birthday Brainteasers to Celebrate Sara Evans's 45<sup>th</sup> Birthday

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Sara Lynn Evans (born February 5, 1971) is an American country music singer and songwriter [1]. For her entire career, she has been signed to RCA Nashville. Today, February 5, 2016 marks Evans's 45<sup>th</sup> birthday and for this reason, I prepared the following ten birthday brainteasers to celebrate her birthday:

1. 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 *Sara*, *Lynn*, and *Evans* are 39, 65, and 61 respectively and the numbers assigned to the letters of *Sara Evans* add up to 100. Interestingly enough, the product of the squares of the month and day numbers of Evans's birthday also equals 100 (*Sara Evans*).
2. The prime factors of 100 (*Sara Evans*) are 2 and 5 which when put side by side yield 25, which if interpreted as 2-5 represents Evans's birth date, February 5.
3. The sum of the digits of Evans's birthday 2-5-1971 equals 25, again representing her birth date, February 5.
4. If Evans's birthday 2-5-1971 is split into 2, 5, 19, and 71, these sum up to 97. Note that number 97 is the 25<sup>th</sup> prime number where 25 interpreted as 2-5 is Evans's birth date, February 5. Moreover, the reverse of the product of the digits of 97 yields 36 and Evans's birthday always occurs on the 36<sup>th</sup> day of each year. Also, the reverse of the sum of the digits of 97 is 61 (*Evans*).
5. The reverse of Evans's birth year 1971, namely 1791, equals  $3 \times 3 \times 199$  where the sum of these three prime numbers is 205, representing Evans's birth date, February 5.
6. If Evans's 45<sup>th</sup> birthday written as 252016 is split into 25, 20, and 16, the sum of these is 61 (*Evans*).
7. The reverse of the sum of the digits of Evans's 45<sup>th</sup> birthday expressed as 252016 yields 61 (*Evans*).
8. The difference of the cubes of the digits of Evans's new age 45 yields 61 (*Evans*).

9. If 2016 is split in the middle into 20 and 16, these add up to 36 where again, Evans's birthday coincides with the 36<sup>th</sup> day of 2016. Also, 2016 equals 36 times 56 where reverse of 56, namely 65, equals the sum of the numbers assigned to the letters of Evans's middle name *Lynn*.
10. Lastly, Evans's 33<sup>rd</sup> birthday that occurred in 2004 was numerically special because it was a perfect square date since 252004 equals 502 x 502 and it most likely went unnoticed. In addition, interestingly enough, the reverse of 502, namely 205, corresponds to Evans's birth date, February 5. Isn't this fun?

Happy 45<sup>th</sup> birthday, Sara Evans!

Note: Next year Evans will turn 46 and here are some brainteasers regarding her new age in 2017:

1. The prime factors of Evans's birth date February 5 expressed as 205 add up to  $5 + 41 = 46$ , Evans's next age.
2. The sum of the prime factors of Evans's next age 46 equals  $2 + 23 = 25$  (February 5).
3. The square of the sum of the digits of Evans's next age 46 yields 100 (*Sara Evans*).
4. The reverse of the sum of the squares of the digits of Evans's next age 46 results in 25, Evans's birth date, February 5.
5. The reverse of twice the reverse of the difference of the cubes of the digits of Evans's next age 46 gives 205, again her birth date, February 5.
6. Evans will turn 46 in 2017 where the prime factors of the reverse of 2017, namely 7102, add up to twice 61 (*Evans*).

[1] Sara Evans, Wikipedia

[https://en.wikipedia.org/wiki/Sara\\_Evans](https://en.wikipedia.org/wiki/Sara_Evans)