

Last Prime-Number Sequential Date: 11/13/17

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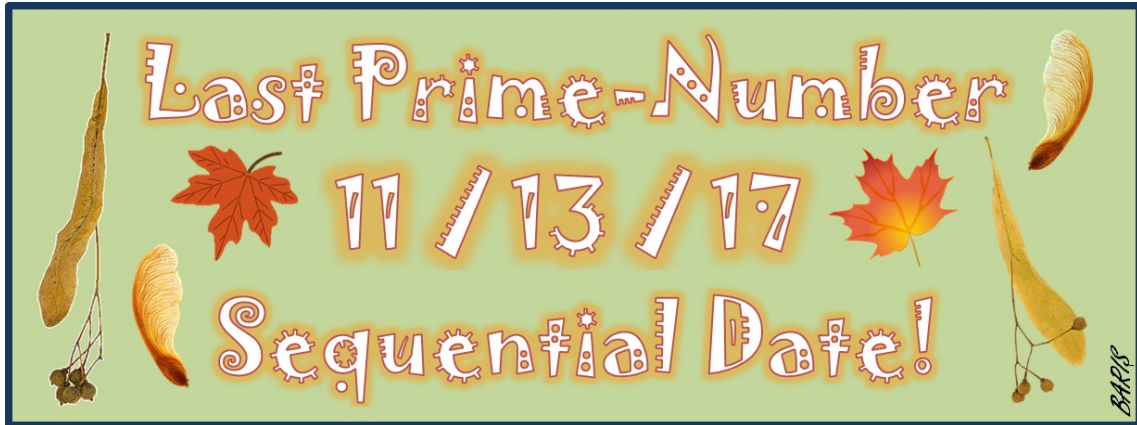


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Monday, November 13, 2017 expressed as 11/13/17 is the fifth and the last prime-number sequential calendar date of its kind to occur in this century. Note that numbers 11, 13, and 17 that constitute this date are prime numbers and they are in consecutive order [1].

Before 11/13/17, the four such prime-number sequential dates that occurred in this century were 02/03/05, 03/05/07, 05/07/11, and 07/11/13, respectively.

It is important to point out that sequential dates expressed only in terms of the rightmost two digits of the year number repeat every century.



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After 11/13/17, other sequential calendar dates will continue to occur in this century and here are some examples to occur over the next ten years:

Calendar date 06/12/18 interpreted as $(1 \times 6)/(2 \times 6)/(3 \times 6)$ represents an arithmetic series.

07/13/19 consists of three alternating consecutive prime numbers. Additionally, 10/13/19 consists of three consecutive happy numbers [2].

In 2020, sequential date 6/12/20 can be interpreted as $(2 \times 3)/(3 \times 4)/(4 \times 5)$.

4/3/21 will be a special sequential date consisting of digits 1 to 4 in descending order. Moreover, 08/13/21 consists of three consecutive Fibonacci numbers, 8, 13, and 21.

In 2022, 5/12/22 will be a sequential date made of consecutive pentagonal numbers 5, 12, and 22 [3].

Sequential calendar date 01/12/23 is made of two consecutive number sequences $\{0, 1, 2\}$ and $\{1, 2, 3\}$ intertwined.

02/06/24 interpreted as $(2!)/(3!)/(4!)$ is a sequential factorial-number calendar date in 2024.

09/16/25 will be a sequential square-number calendar date. Furthermore, 7/24/25 is made of a sequential Pythagorean triple 7, 24, and 25 since the sum of the squares of 7 and 24 equals the square of 25.

10/17/26 viewed as $(2 \times 3 + 4)/(3 \times 4 + 5)/(4 \times 5 + 6)$ will be a special kind of sequential date.

Sequential calendar dates 01/04/27 interpreted as $(1^1)/(2^2)/(3^3)$, 01/08/27 consisting of consecutive cube numbers, and 03/09/27 observed as $(3^1)/(3^2)/(3^3)$ are all to occur in 2027.

And so on.

Sequential calendar dates are not only fun to keep track of but they also possess the power of promoting mathematics for all ages. 11/13/17 can help teach STEM students about prime numbers. Furthermore, 111317 has another interesting property: it is the 317th date of this year where 317 coincides with its rightmost three digits.

Happy prime-number sequential date, 11/13/17!

[1] A. Inan, B. Inan, and N. Inan, "Create Your Own Sequential Calendar Dates," *The Beacon*, November 13, 2015.

<http://www.upbeacon.com/article/2015/11/create-your-own-sequential-calendar-dates/>

[2] Happy number, Wikipedia

https://en.wikipedia.org/wiki/Happy_number

[3] Pentagonal number, Wikipedia

https://en.wikipedia.org/wiki/Pentagonal_number

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