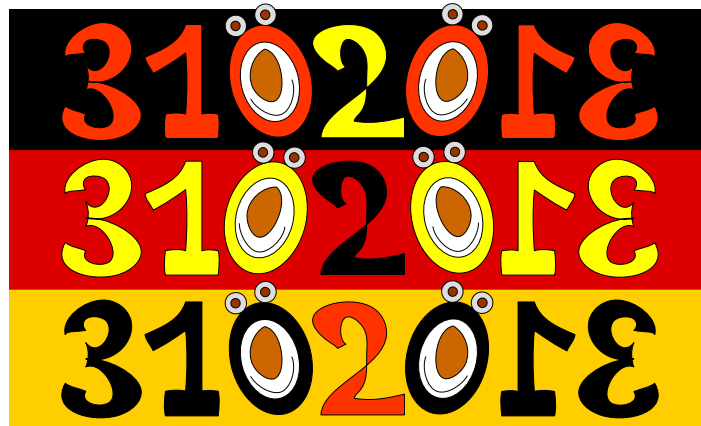


The 23rd Anniversary of the German Unity Day (Tag der Deutschen Einheit) is a Palindrome Day  
(Aziz S. Inan, Ph.D., Professor, Electrical Engineering, University of Portland, Portland, Oregon)  
(October 1, 2013)



German Unity Day is a national holiday in Germany, celebrated every year on October 3rd, to commemorate the nation's formal unification. 23 years ago, on August 23, based on West Germany's Article 23 (which allows former German states to join the Federal Republic upon their accession), East Germany's House of Representatives voted for unilateral adherence by the East German Lander to West Germany's Constitution and agreed to October 3, 1990 (3-10-1990, or simply, 3101990) as the official unification date with West Germany [1].

This Thursday, October 3, 2013 marks the 23rd anniversary of the German Unity Day. Interestingly enough, this Thursday is also the only palindrome day in 2013 since its full date can be expressed as 3-10-2013, or simply, 3102013, a seven-digit palindrome number [2]. This coincidence makes this year's German Unity Day special particularly considering the fact that the next time October 3rd will become a palindrome day is 1000 years later, on 3-10-3013.

Also, the digits of the formal unification date, 3101990, add up to 23, which make the 23rd anniversary of German Unity Day this Thursday even more special.

In addition, if the 23rd anniversary date 3102013 is split as 3, 10, 20, and 13, the sum of these four numbers is twice 23.

Interestingly enough, the official unification date, 3101990, also possesses a palindromic property. How? Consider the nine-digit palindrome number, 712575217. If one introduces four multiplication signs into this number as,  $71 \times 257 \times 5 \times 2 \times 17$ , what is the result of this multiplication? (Answer: 3101990!) Isn't this fun? By the way, note that  $712575217$  equals  $67 \times 1753 \times 6067$  where these three primes add up to 7887, another palindrome number.

The full date of next year's German Unity Day, 3102014, also has a palindromic property. It turns out  $3102014$  equals  $2 \times 29 \times 79 \times 677$  where these primes add up to 787, another palindrome!

How about the German Unity Day in 2015? Interestingly,  $3102015$  equal  $3 \times 5 \times 7 \times 31 \times 953$  where these five primes add up to 999, another palindrome. Amazing!

In light of all of this special occasion, happy palindrome, German Unity Day!

[1] German reunification, Wikipedia

[http://en.wikipedia.org/wiki/German\\_reunification](http://en.wikipedia.org/wiki/German_reunification)

[2] A. Inan, "Palindrome Dates in 2011," *The Beacon*, Vol. 112, Issue No. 8, pp. 12 & 13, University of Portland, Portland, Oregon, October 28, 2010.

<http://upbeacon.com/2010/10/28/palindrome-dates-in-2011/>