



Math for the people, by the people.

# Carmichael number 561

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561 is the smallest Carmichael number in the ring of integers. However it is only a pseudoprime in the ring of Gaussian integers. We can use pari to find the bases to which 561 is a pseudoprime. I found it is pseudoprime to bases  $12 + i$ ,  $22 + i$ ,  $34 + i$  and  $56 + i$ . Needless to say it is a pseudoprime to other bases too. More on this later.