



# PROBLEM # 672

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**Posted on:** 7 April

**Due on:** 14 April

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987,  $\dots$

is the celebrated *Fibonacci sequence* in which each term beginning with the third is equal to the sum of the two previous terms. As you can see the 15th term of the sequence ends with a 0. Prove that there is a term in the Fibonacci sequence that ends with 0000.

The problem of the week can be found online at

<http://potw.mth.cmich.edu/>

Solutions can be mailed to

[chakr2d@cmich.edu](mailto:chakr2d@cmich.edu)

with subject line "POTW 672"