

Cal Poly Department of Mathematics

Puzzle of the Week

May 15 - 21, 2014

Relayed to me by Bob Wolf:

For nonnegative integers n, m , let $a_n = 2^n - 1$ and let $b_m = 2^m + 1$. Is there any a_n , other than $a_n = 1, 3$, for which a_n divides b_m , for some m ?

Solutions should be submitted to Morgan Sherman:

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before next Thursday. Those with correct and complete solutions will have their names listed on the puzzle's web site (see below) as well as in next week's email announcement. Anybody is welcome to make a submission.

<http://www.calpoly.edu/~sherman1/puzzleoftheweek>