

Re: Counterexample to $t((c^n - a^n) \bmod b) \mid \phi(b)$

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Doug Goncz <dgoncz@aol.com> blithered:

> >From: Phil Carmody *thefatphil_demunged@yahoo.co.uk*

>

> >Don't just "say", prove.

>

> *Good advice.*

>

> $a b c (c^n - a^n) \bmod b$

> 5 6 7 0 2 0 2 0 2...

>

> *period is two (2).*

>

> *The totatives of $b=6$ are 1, 4, and 5. 1 has no factor and can have no*

> *factor in common with 6. $\phi(6) = 3$.*

$\gcd(4,6) = 2 > 1$. 4 is not a totative of 6.

So, what is $5^{\phi(6)} \bmod 6$?

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