

# Re: Fermat's Last theorem short proof

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- *From:* bassam king karzeddin <bassam@xxxxxxxxxx>
  - *Date:* Thu, 19 Apr 2007 21:43:36 EDT
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In article  
<8917073.1177024391960.JavaMail.jakarta@xxxxxxxxxxxxxxxxx  
orum.org>,  
bassam king karzeddin <bassam@xxxxxxxxxx> wrote:

bassam king karzeddin wrote:

Dear All

As a generalization to one of my posts in this  
thread

Given, two distinct, coprime non zero  
integers

(x & y),

Theorem- (new or old, I don't care),  
precisely

I

don't know

If, (n & m) are two positive integers, where

$m = \gcd((x+y), n)$ ,

then this implies the following theorem:

$\text{Gcd}((x+y), (x^n+y^n)/(x+y)) = \text{Rad}(m)$ ,

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Where Rad (m) equals the product of all the prime

factors of (m), that is to say

Rad (m) is square free number that divides

$(x^n+y^n)$ ,

Oh? Perhaps you need another condition, since

$x = 15$  and  $y = 49$  are coprime and if we pick  $n =$

8

then

$$m = \gcd(x+y, n) = \gcd(64, 8) = 8$$

but  $15^8 + 49^8 = (16617746730113)(2)$  which isn't even divisible by  $x+y$ .

Regards,

Rick

Yes Rick,  
and thank you very much for the note

In fact, and for the purpose of FLT, you may assume

either (n) is odd

positive integer

OR (x & y), are both odd–distinct–coprime–

integers,

If  $x = 3$  and  $y = 1$  then  $(x^2 + y^2) / (x + y)$  is not an integer.

—  
Gerry Myerson (gerry@xxxxxxxxxxxxxxxx) (i -> u for email)

Re: Fermat's Last theorem short proof

Yes, I always do those silly mistakes, un intentionally, but any way, they actually help to drag others for discussion, and therefore I will stick to the condition where  $(n)$  is odd positive integer, since the issue is FLT, and more over the even case is a few lines proof only

I should like to thank you sincerely for the note

My Regards  
B.Karzeddin