

# Re: Probable Prime Number

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*Source:* <http://sci.tech-archive.net/Archive/sci.math/2006-10/msg02276.html>

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- *From:* bassam king karzeddin <bassam@xxxxxxxxxx>
  - *Date:* Mon, 09 Oct 2006 08:08:19 EDT
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bassam king karzeddin <bassam@xxxxxxxxxx> wrote:

"If,  $(r^2)$  divides  $(p^2 + q^2)$ , and the quotient  $(n)$ ,  
 $n = (p^2 + q^2) / r^2$ , where  $(p, q, r)$  are odd

prime numbers, then  $(n)$  is

even square free number"

$(79^2 + 47^2) / 13^2$  is not square free.

Mike Guy

Thank You Mike Guy for posting a counter example

The game is that, we should make changes whenever a counter example is found, and this may lead us somewhere ?

So I will restate it in another form,

Conjecture

"If,  $(r^2)$  divides  $(p^2 + q^2)$ , and the quotient  $(n)$ ,  
 $n = (p^2 + q^2) / r^2$ , where  $(p, q)$  are odd prime numbers, and  $(r)$  is odd integer, then  $(n)$  is even "square free number"

So, let us see a counter example!

Thanking you

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