Re: Another_ p^(2^k), Karzeddin's like Conjecture

Source: http://sci.tech−archive.net/Archive/sci.math/2006−05/msg04945.html

- *From*: quasi <quasi@xxxxxxxx>
- *Date*: Fri, 26 May 2006 18:01:51 −0400

On Fri, 26 May 2006 17:03:04 EDT, bassam king karzeddin
<bassam@xxxxxxxxxx> wrote:

> > It is unclear what you mean by "prime factor
>
> exponents". If you are
>
> > saying that
> > if a prime q divides n, then it must do so to an
>
> even power, then this
>
> > is false.
> > Or do you allow k = 0? You would then be saying
>
> that if q^s | n for
>
> > prime q, then
> > s is never 3,5,6,7,9,10,11, ...
> >
> > This is almost certainly true on probabilistic
>
> grounds, and is not a
>
> > new conjecture.
>
> It's not true on any grounds.
>
> For example, let p=3, x=17, y=53.
>
> Then (x^p+y^p)/(x+y) equals 13^3.

I should like to thank you alot quasi for a very nice counter example, as this will help me alot to state it in a better version

> However Karzeddin's has previously stated some similar conjectures which appear to be correct.
>
> For example, here is a version of one of his conjectures (edited):
>
> If n,x,y are positive integers with n>2, then the prime factorization of x^n+y^n includes at least one prime factor with exponent at most 2.

I think, you are developing my previous conjecture to make (k) as finite as equal to (1 or 2), only, and this is a very important step of yours

> You have no right to claim it as your own.

Indeed, I have no right to make a misleading conjectures, that was discovered by quasi

No, it's essentially your conjecture. All I did was make a very minor modification and then edit the statement slightly to improve the wording.