

Re: Factorising this...

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- *From:* Albert <albert.xtheunknown0@xxxxxxxxxx>
 - *Date:* Sun, 9 Dec 2007 14:20:13 -0800 (PST)
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On Dec 10, 8:41 am, quasi <quasi@xxxxxxxxxx> wrote:

On Sun, 9 Dec 2007 13:30:21 -0800 (PST), Albert

<albert.xtheunkno...@xxxxxxxxxx> wrote:

Hi, I'm in Year 8 (Australia) so this should be an easy question for you guys seeing what this group is about... but how do you 'fully factorise' this?

(They've given me the identities: difference of two squares, sum and difference of two cubes and the perfect square rule but I'm not sure how you apply them; i can do the individual questions relating to each one of these identities, but then again this question is in the 'problems section' [the last question] of this booklet...)

$$a^2b^2 - a^2 - b^2 + 1$$

Hint:

First try 2 simpler problems:

(1) Factor: $uv + u + v + 1$

(2) Factor: $uv - u - v + 1$

quasi

Thanks - I solved my original question:

$$\begin{aligned} a^2b^2 - b^2 - a^2 + 1 &= b^2(a^2 - 1) - (a^2 - 1) \\ &= (a^2 - 1)(b^2 - 1) \end{aligned}$$