

Re: How do I do this problem without a calculator?

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- *From:* [bell3774@xxxxxxxxxx](mailto:bell3774@xxxxxxxxxx)
  - *Date:* 5 Mar 2006 19:09:47 -0800
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I don't understand.

Chip Eastham wrote:

bell3774@xxxxxxxxxx wrote:

$$6^{19} \bmod 22$$

19 is prime, but Fermat's Little Theorem requires  $p+1$  to work...

You might want Euler's generalization of Fermat's Little Thm.

It doesn't matter that 19 is prime. You need to consider the modulus 22.

regards, chip