

# Re: Inequality sum( log(p) ), p prime

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- *From:* Robin Chapman <[rjc@xx](mailto:rjc@xx)>
  - *Date:* Tue, 10 May 2005 08:38:20 +0100
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Carl R. wrote:

- > Let  $\theta(x) = \sum_{p \leq x} \log(p)$  over all primes  $p$ ,  $p \leq x$ .
- >
- > Why is  $\theta(x) \leq (\log(4)) * x$  ??

You could see many texts on elementary number theory, say Hardy & Wright or

<http://www.maths.ex.ac.uk/~rjc/etc/bertrand.pdf>

Robin Chapman, [www.maths.ex.ac.uk/~rjc/rjc.html](http://www.maths.ex.ac.uk/~rjc/rjc.html)

"Elegance is an algorithm"

Iain M. Banks, [\\_The Algebraist\\_](#)

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• **References:**

◆ ***Inequality sum( log(p) ), p prime***

◇ *From:* Carl R.

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