

Re: Range of Function

Source: <http://sci.tech-archive.net/Archive/sci.math/2006-06/msg03686.html>

- *From:* The World Wide Wade <waderameyxiii@xxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 29 Jun 2006 21:25:36 -0700
-

In article

<Pine.BSI.4.58.0606292045120.16292@xxxxxxxxxxxxxxxxxxxxxxxx>, William Elliot <marsh@xxxxxxxxxxxxxxxxxxxxxxxx> wrote:

On Thu, 29 Jun 2006, Simon Dean wrote:

I am trying to calculate the range of:

$$f(x) = \sin(\operatorname{Arctan} x)$$

–and–

$$g(x) = \ln(\cos x)$$

Any suggestions would be greatly appreciated!

$$\sin \arctan x = \frac{x}{\sqrt{1+x^2}}$$

No, $\sin \arctan x = \frac{x}{\sqrt{1+x^2}}$. Besides, this step is a needless complication.

.