# Re: Distributive property of functions

***Source:*** http://sci.tech−archive.net/Archive/sci.math/2008−03/msg04342.html

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- *Date*: Mon, 31 Mar 2008 08:30:40 −0700 (PDT)

On Mar 31, 10:19 am, Olumide <50...@xxxxxx> wrote:

> Hello −
>
> I hope this isn't too trivial to ask but, I'm working through a proof
> that appears to rely on the distributive property of polynomials, i.e.
>
> (f + g)(x) = f(x) + g(x)
>
> without saying saying so. I've googled a bit, and I've found that
> trigononometric functions e.g. sin(x) do not have this property,

Are you perhaps getting confused with linearity?

If f is linear, f(a*x + b*y) = a*f(x) + b*f(y)

And certainly sin(x) is not linear.

What was the "violation" you think you found with sin(x)?

− Randy
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