
Subject: Re: Mathematical manipulations
Posted by [David Fanning](#) on Fri, 06 Feb 2004 16:03:03 GMT
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Anastasiya writes:

- > Me is already couple of month in IDL and already understood that here
- > exist huge amount of stones under the water-:(
- > I am currently working on the multiple scattering of X-rays in 3D.
- > Everythin seems was O.K. But...
- > The initial parameters ray direction and initial position, spheres
- > centers and radiuses. Using Snell's law, vector product of unit
- > vectors(incident direction and normal to the surface or refracted
- > direction and normal) I found incident and refracted angles.
- > I need also to find angle between refracted ray direction and initial
- > direction(all rays was parallel to OX [1,0,0]. Let's say t[0]
- > x-coordinate of refraction direction is 1.0000. $\text{Acos}(1.0000)=0.0000$.
- > But me recieving 2.7905781e-006!!!!!!
- > What does it mean, may be somebody may explaine me where to check?.
- > May be me using not correctly mathematics in IDL.
- > P.S.Loops I will eliminate in future

You will probably get more useful advice in a few minutes,
but while you are waiting, here are a couple of articles
I think you might find interesting:

http://www.dfanning.com/math_tips/sky_is_falling.html
http://www.dfanning.com/math_tips/double.html

Cheers,

David

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