Subject: Re: Math Question
Posted by Foldy Lajos on Mon, 30 Oct 2006 15:29:36 GMT
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On Mon, 30 Oct 2006, edward.s.meinel@aero.org wrote:

>
> Rob wrote:
>> In general, powers of negative numbers are complex so you should start
>> with that assumption in the expression:
>>
>> IDL> print,(dcomplex(-1.0,0.0))^2.01
>> (0.99950656, 0.031410729)
>> IDL> print,(dcomplex(-1.0,0.0))^2.0
>> (1.0000000, -2.4492127e-016)
>>
>> It would be nice if IDL told you this rather than throwing a NaN at
>> you.
>
> Actually, to be consistent, IDL should just return a complex number.
> One of the reasons that I've been using IDL is that it automatically
> changes the variable TYPE when necessary so that I don't have to keep
> track of whether I'm operating on a BYTE, LONG, DOUBLE, whatever... Now
> I find out that it's "mostly" true (but who can refuse a nice mutton
> sandwich?).
>
> I would consider this a bug.
>
> Ed "to blave" Meinel
>

I think complex results should be returned only if complex input was
given, like in the example above. Otherwise, all your data would easily
become complex. Think of sqrt(-1.0), log(-1.0), asin(-2.0), etc.

regards,
lajos