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Subject: Re: WRONG RESULTS WITH IDL  
Posted by [Andy Loughe](#) on Tue, 05 May 1998 07:00:00 GMT  
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Maybe this helps to explain the "sin()" difference...

```
print, 12345678901.12345678901D, format='(f30.15)'  
12345678901.123456954956055
```

```
print, double(12345678901.12345678901), format='(f30.15)'  
12345678848.0000000000000000
```

Apparently when converting the real to double in the second case, there is a great loss in precision since the original real number couldn't properly store a number that large.

Caesar E. Ordonez wrote:

```
>  
> I did the following:  
>  
> IDL> x = 12345678901.12345678901D  
> IDL> print,sin(x)  
> -0.37327885
```

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"I do not feel obliged to believe that the same God who has endowed us with sense, reason, and intellect has intended us to forego their use."  
-Galileo