Subject: Re: IDL mathematics
Posted by sjt on Thu, 01 Sep 1994 12:13:42 GMT
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dean@phobos.cira.colostate.edu wrote:

: How come the following expression gives the wrong answer.

: J = 201+((1461*(1994+4799))/4)-(3*((1994+4899)/100)/4)-2465022

: J = -2457713

: It should be:

: J = 201+((1461.*(1994+4799.))/4.)-(3.*((1994+4899.)/100.)/4.)-24 65022.

: J = 16270.5

: Kelly Dean

The problem is IDL's conversion rules. You have two problems here:
a) 1461*(1994+4799) is a combination of 3 ints and is thus evaluated as
an int whereas it needs to be a long or float to get the right answer
b) Division of integers is an integer devide e.g. 3/2 = 1 and 4/5 = 0.

I think the minimal modification to get the right answer is:

```
 J =  201+((1461.*(1994+4799))/4)-(3*((1994+4899)/100.)/4)-2465022
            ^                            ^
```

--
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"If all else fails--read the instructions!"

```
  O__
 -- V`
```