
Subject: Re: matrix division

Posted by [jameskuyper](#) on Thu, 22 May 2008 14:57:51 GMT

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David Fanning wrote:

> James Kuyper writes:

>

>> What if b is < 0?

>

> I was hoping you would tell me, so I didn't have to

> think about it anymore. :-(

For the integer case:

```
ratio = numerator/denominator
```

```
bad = WHERE(denominator eq 0, count)
```

```
IF count gt 0 THEN ratio[bad] = replacement_value
```

replacement_value needs to be carefully chose for the context of your problem. You might want to give different replacement values depending upon whether the numerator is positive, negative, or 0. There's probably a more elegant approach, but three different WHERE's would certainly be sufficient to cover those cases.

For the floating point case, IDL fills in the relevant elements of ratio with -Inf, Nan, or Inf, depending upon the sign of the numerator, and I can't think of any better way of handling it than to use precisely those value. If you need to use your result for further computations where those values would be unacceptable, replace them, with logic similar to the above, but using the FINITE() function.
