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Subject: finding array[3] in array[3,n]

Posted by [T Bowers](#) on Thu, 25 Jan 2001 16:47:42 GMT

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If I have

```
a=[ $
  [0,1,2], $
  [3,4,5], $
  [6,7,8]]
```

```
b=[3,4,5]
```

how do I find where in a is the row vector b? The answer should be 1, the 2nd row of a. I've tried many permutations of where(), but I just don't get it. The only way I can get an answer is to loop through the rows till i find a match. What I'm really tryin' to do is to find a color in a color table, e.g. load RAINBOW color table, (loadct,13) then identify where a color is. For the color that's listed 6th in the color table (an almost black) that'd be the 5th row index. Like:

```
loadct, 13
tv!ct, r,g,b,/get
colorTable = transpose([[r],[g],[b]]) ;//a [3, 256] array
colorALMOSTBLACK=[22,0,9]
indexALMOSTBLACK=where(colorTable eq colorALMOSTBLACK)
```

What I want is the answer 5 because if you print the 1st 6 rows of colortable you get:

```
print, colorTable[*,0:5]
```

```
 0  0  0
 4  0  3
 9  0  7
13  0 10
18  0 14
22  0 19
```

I'm looking for that 6th row which is [22,0,9], my search array.

I've tried alot of different stuff, but i just don't get it

```
IDL> print, where(colorTable eq colorALMOSTBLACK)
```

```
1
```

```
IDL> print, where(colorTable[*,0:*] eq colorALMOSTBLACK)
```

```
1
```

```
IDL> print, where(colorTable[*,0:*] eq colorALMOSTBLACK[0:*])
```

```
1
```

etc., etc., etc....

So, does anyone know see an elegant solution to this problem??

tia,  
tbowers

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