Subject: Re: Determinant of a matrix

Posted by fd\_luni on Wed, 20 Nov 2013 14:57:43 GMT

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> What you are asking for is the rank of your matrix (i.e., mathematically, the number of independent columns). Matrix rank can be determined by singular value decomposition: the rank is the number of singular values which are not zero. In IDL, you can write:

```
> 
> 
> 
> if A is your matrix:
> 
> IDL> LA_SVD, A, W, U, V
> 
> IDL> rank_of_A = N_elements(W[where(W ne 0)])
> 
> 
> 
> alx.
```

I got 4 singular values so the rank(A)=4? This means that the four rows are linearly independent? The eigenvalues are look like this:

235042.27 10979.266 286.59332 7.6813673