Subject: Re: Transforming a nonlinear equation
Posted by wlandsman on Tue, 07 Aug 2007 17:37:32 GMT
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Very nice. Thanks.

I now realize that I actually have a nonlinear function of two variables f(x,y) and need to find the new coefficients under linear transformations of x-->x' and y-->y'. So I'll need to first find the new X coefficients for each term in Y, and then find the new Y coefficients for each term in X'. But it should be straightforward, if tedious. --Wayne

> then the following code should deliver the new coefficients of the
> y-polynomial:
>
> degree=n_elements(a)-1
>
> newarray=a*0
>
> FOR i=0,degree DO BEGIN
> FOR j=0,i DO BEGIN
> newarray[j]=newarray[j]+a[i]*binomial(j,i)*alpha^j*beta^(i-j )
> ENDFOR
> ENDFOR
>
> where the binomial(j,n) function returns
> factorial(n)/(factorial(j)*factorial(n-j))
>
> Ciao,
> Paolo