

Re: A question on Newton's Method

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- *From:* Jon Harrop <usenet@xxxxxxxxxxxxxxxx>
 - *Date:* Sun, 03 Apr 2005 20:02:03 +0100
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James Van Buskirk wrote:

> "Jon Harrop" <usenet@xxxxxxxxxxxxxxxx> wrote in message
> [news:42500867\\$0\\$63445\\$ed2e19e4@xx](mailto:news:42500867$0$63445$ed2e19e4@xx)
>> What is Lisp-like about Mathematica and OCaml?
>
> They are equally incomprehensible.

Really? Have you considered the Fortran equivalent of my numerical analysis example? How about some other examples? Can you design a single example of numerical analysis which is more comprehensible in Fortran?

```
>> Yes it does:  
>  
>> In[1]:= f[x_] = x^3 - x - 1  
>  
>> Out[1]= -1 - x + x^3  
>  
>> In[2]:= D[f[x], x]  
>  
>> Out[2]= -1 + 3 x^2  
>  
> No, the right context is:  
>  
> f[x_] := x^3-x-1  
> fp[x_] := D[f[x],x]  
> Plot[fp,{x,-1,2}]  
>  
> Which, unless they changed Mathematica recently, doesn't  
> do anything useful.
```

Of course not, it's wrong.

Firstly, there's no point in defining fp[x] when you can just use f'[x].
Secondly, you need to give the plot function an expression to plot, not a function. So you want:

```
Plot[f'[x], {x, -1, 2}]
```

which works perfectly.

—
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- **Follow-Ups:**
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 - ◇ From: James Van Buskirk

- **References:**
 - ◆ **[A question on Newton's Method](#)**
 - ◇ From: David M
 - ◆ **[Re: A question on Newton's Method](#)**
 - ◇ From: Jon Harrop
 - ◆ **[Re: A question on Newton's Method](#)**
 - ◇ From: beliaovsky
 - ◆ **[Re: A question on Newton's Method](#)**
 - ◇ From: James Van Buskirk
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 - ◇ From: Roman Werpachowski
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