
Subject: Multiple parameters for ZEROFCN

Posted by [Rick Walton](#) on Mon, 02 Jan 2012 22:41:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

I would like to find the root of a function $f(x)$ that depends on the values from an array. Using the IMSL function ZEROFCN appears to only allow a single parameter to be defined, which is x . But I would like to vary one of the constants in the function but when I try to use a userdefined expression for this it causes an error. To demonstrate what I'm trying to achieve see the function and code below. If anyone has a simple solution to this I would really appreciate the help. Thanks in advance.

```
FUNCTION f, x, y
RETURN, ((sinh((1.4 +x-0.25)/(0.4)))/(sinh((x-0.25)/0.4)))-y
END
```

```
;array containing data for constant y
Y=fltarr(252)
```

```
;new file to input zeros
zero=fltarr(252)
```

```
;function to determine zeros in f(x)
FOR i=0, 251 DO BEGIN
zero(i)=ZEROFCN("f", y(i))
```
