

[7.1] Create evaluated Y= Editor equations in programs

You can create equations in the 89/92+ by storing the expression to the system variables $y_n(x)$, where 'n' is the number of the equation. For example,

$$a*x^2+b*x+c \rightarrow y1(x)$$

stores the expression to the first equation, $y1(x)$. But if a , b and c have numeric values, those values will not be substituted in the expression because the expression has not been evaluated. You can force the evaluation using *string()* and *expr()*, like this:

```
evalyx()  
prgm  
local a,b,c,ex  
  
4→a  
3→b  
2→c  
  
a*x^2+b*x+c→ex  
  
expr("define y1(x)="+string(ex))  
  
Endprgm
```

evalyx() puts this equation in the Y= Editor:

$$y1=4x^2+3x+2$$

This method will work in a program, but not in a function. Since a , b and c were defined before the *expr()* function, those values are replaced. Any variables which are not defined will remain variables. Note that it is not necessary to define the *ex* variable; this works, too:

```
expr("define y1(x)="+string(a*x^2+b*x+c))
```

(credit declined)