

File Name: DEQ.8XP Type: Program Protected: No
Comment:Program file 05/21/13, 10:58

```
FnOff
PlotsOff
ClrHome
a+b i
Ø→θ

Disp "*****"
Disp ""
Disp " HL DEQ SOLVER"
Disp ""
Disp "BEN and BRIANNA"
Disp ""
Disp "*****"
Pause
ClrHome
```

```
Menu("PICK AN ORDER", "1ST ORDER", 1, "2ND ORDER", 2, "3RD ORDER", 3, "QUIT", 4)
```

```
Lbl 1
1→0
Disp "AY+B=Ø"
Prompt A,B
```

```
Lbl 5
```

```
solve(AY+B,Y,Ø,{^-1≤99,1≤99})→M
Goto 9
```

```
Lbl 2
Disp "AY^2 +BY+C=Ø"
Prompt A,B,C
2→0
```

```
Lbl 6
```

```
If θ=1:Then:E→A:S→B:T→C:End
```

```
((^-B+√(B^2 -4AC)) / (2A))→M
((^-B-√(B^2 -4AC)) / (2A))→N
```

```
If θ=1:Then:Goto 7:End:
```

```
Goto 8
```

```
Lbl 3
```

```
Disp "AY^3+BY^2 +CY+D=Ø"
Prompt A,B,C,D
3→0
solve(AY^3+BY^2 +CY+D,Y,Ø,{^-1≤99,1≤99})→P
A→E:AP+B→S:AP^2 +BP+C→T:AP^3+BP^2 +CP+D→U
```

```
1→θ
Goto 6
```

```
Disp "ROOTS:"
```

```
Disp ""
Lbl 7
Disp P
Lbl 8
Disp N
Lbl 9
Disp M

Disp ""
Disp "CONTINUE?"
Pause
prgmDIF
Lbl 4
ClrHome
Stop
```