

Point: P0:03 P1:03

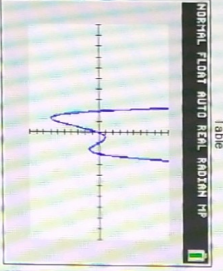
Y1:  $-x^3 - 4x^2 + 4x$

Equation

- Y1=
- Y2=
- Y3=
- Y4=
- Y5=
- Y6=
- Y7=

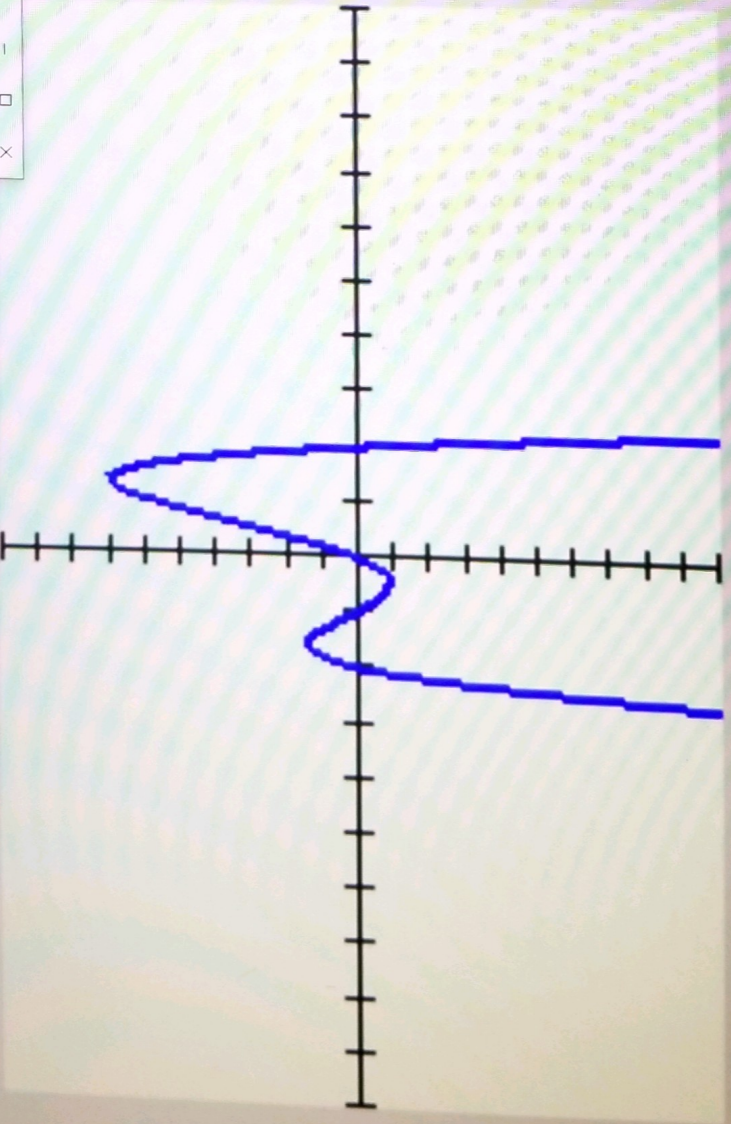
Table

X	Y1
0	0
1	0
2	0
3	30
4	144
5	420
6	1080
7	2380
8	4594
9	8570



Key Press History Large Screen

# NORMAL FLOAT AUTO REAL RADIAN MP



Snipping Tool

File Edit Tools Help

New Mode Delay

Graph the equation  $y = x^4 - x^3 - 4x^2 + 4x$ .

Show Key Press history





a) Approximate the zeros of the function via the calculate menu.

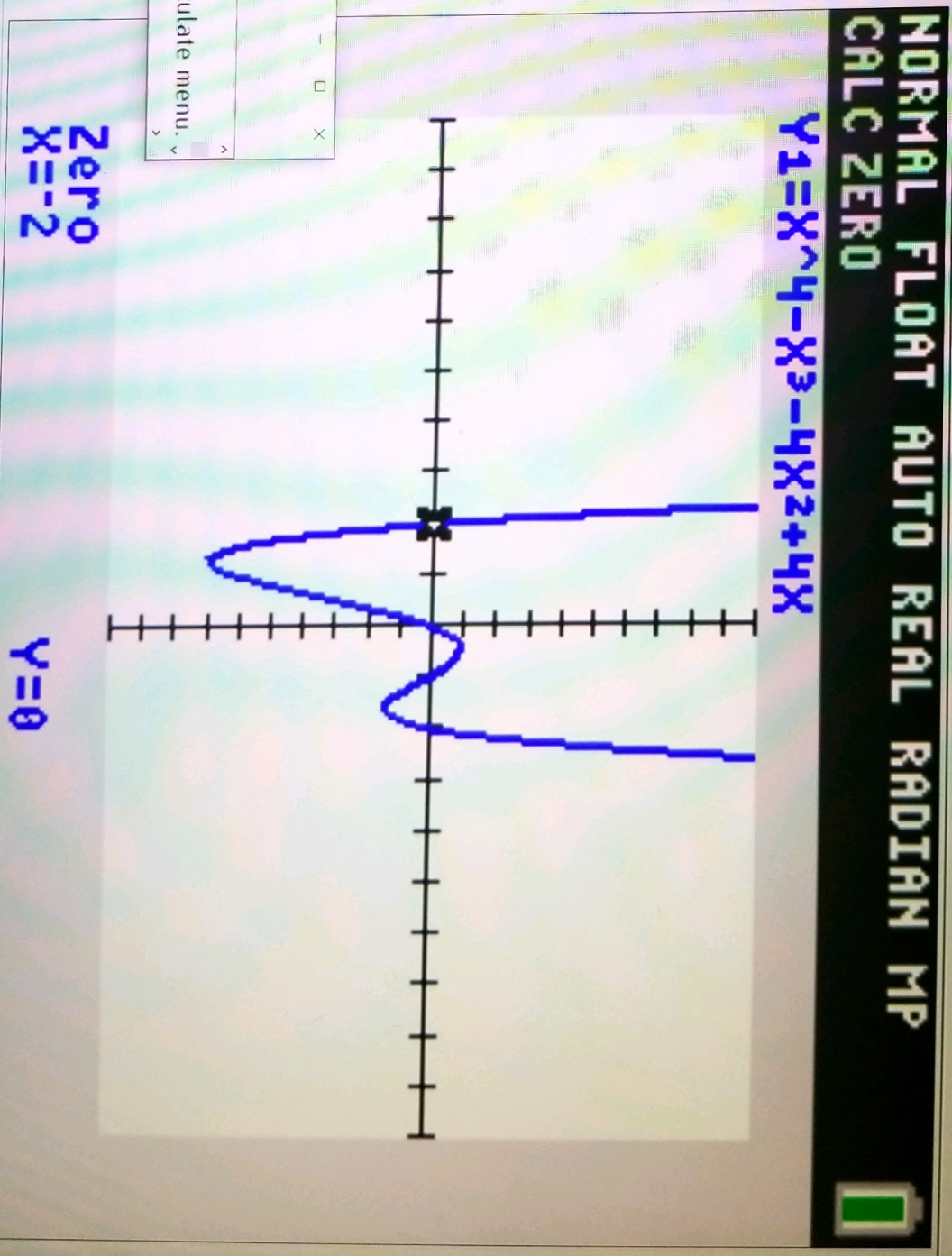
Equation

Point 1:  $X=0$   
Point 2:  $X=0$   
Point 3:  $X=0$   
Equation:  $Y1=X^4-X^3-4X^2+4X$

Table

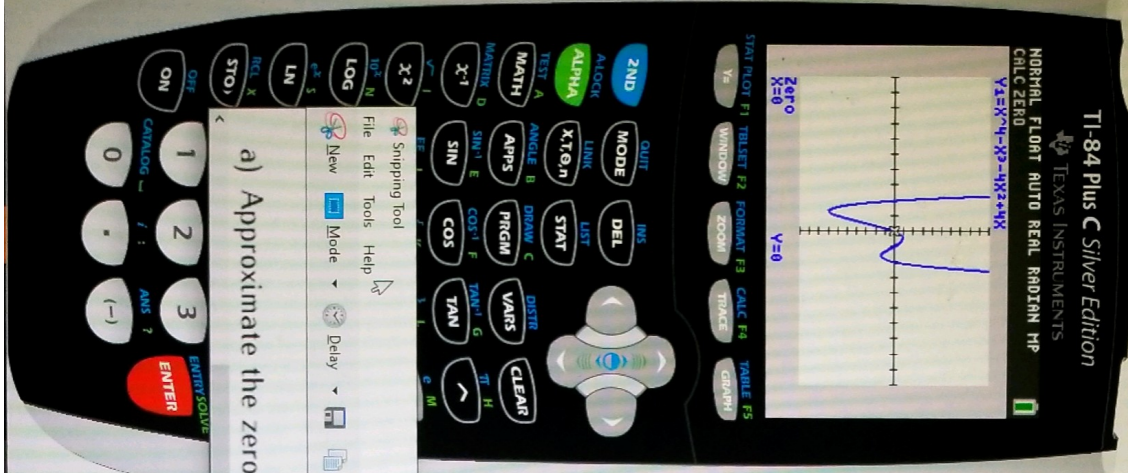
X	Y1
0	0
1	0
2	0
3	30
4	314
5	4214
6	4960
7	5286
8	5186
9	4650
10	3690

Graph



Show Key Press History





a) Approximate the zeros of the function via the calculate menu.

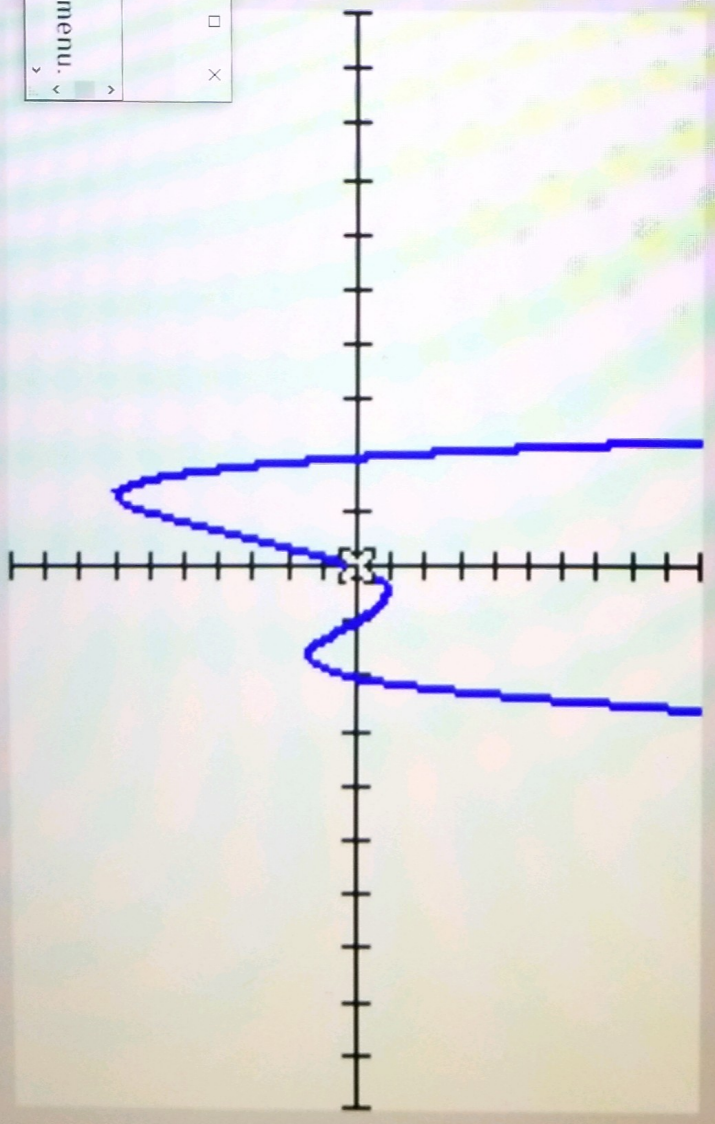
Zero  
X=0

Y=0

Show Key Press History

Key Press History Large Screen

NORMAL FLOAT AUTO REAL RADIAN MP  
CALC ZERO  
Y1=X^4-X^3-4X^2+4X



Plot Points

- Y1:  $X^4 - X^3 - 4X^2 + 4X$
- Y2 =
- Y3 =
- Y4 =
- Y5 =
- Y6 =
- Y7 =

Equation

NORMAL FLOAT AUTO REAL RADIAN MP

PRESS  $\square$  FOR  $\Delta$

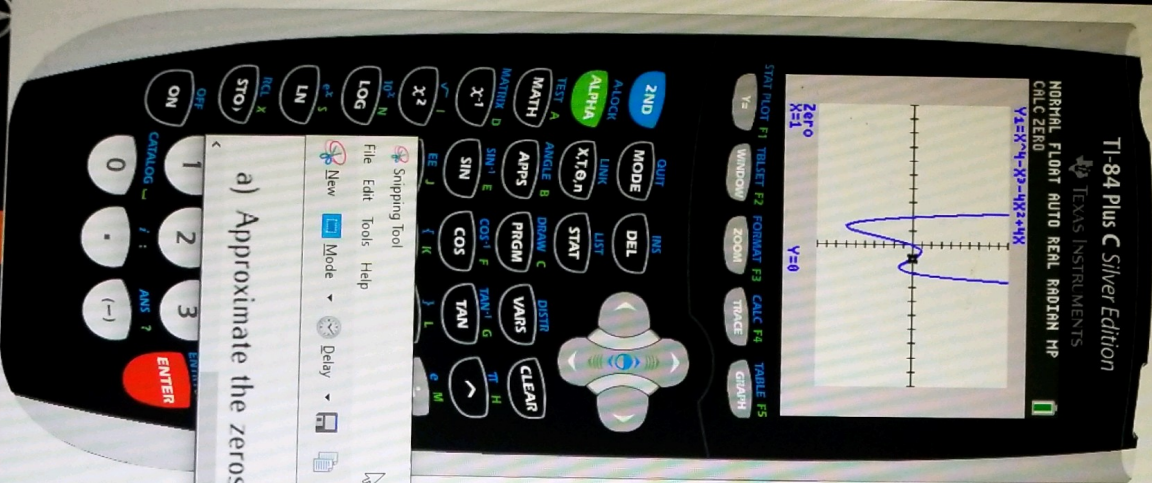
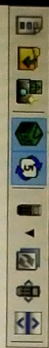
$\Delta$	X	Y1
1	0	0
2	1	0
3	2	-4
4	3	-9
5	4	0
6	5	25
7	6	84
8	7	196
9	8	352
0	9	554

Table

NORMAL FLOAT AUTO REAL RADIAN MP

Graph





a) Approximate the zeros of the function via the calculate menu.

Snipping tool

File Edit Tools Help

New Mode Delay

Normal Float Auto Real Radian HP

Point P1=0 P2=0

$Y1 = X^3 - 4X^2 + 4X$

Equation

0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	5	6	7	8	9	10
2	8	28	72	136	220	320	432	552	680	816
3	27	108	324	648	1080	1600	2208	2880	3600	4368
4	64	288	864	1728	2816	4096	5568	7232	9000	10880
5	125	600	1800	3600	5625	7840	10240	12800	15500	18360
6	216	1080	3240	6480	10296	14400	18816	23440	28160	33000
7	343	1764	5040	10080	15432	21040	26816	32760	38880	45168
8	512	2880	8160	16320	24800	33504	42432	51584	60960	70560
9	729	4320	12240	24480	36864	49440	62176	75072	88140	101376
10	1000	6000	18000	36000	54000	72000	90000	108000	127000	147000

Table

Normal Float Auto Real Radian HP

X=0

Key Press History Large Screen

**NORMAL FLOAT AUTO REAL RADIAN MP**

**Y1 = X^3 - 4X^2 + 4X**

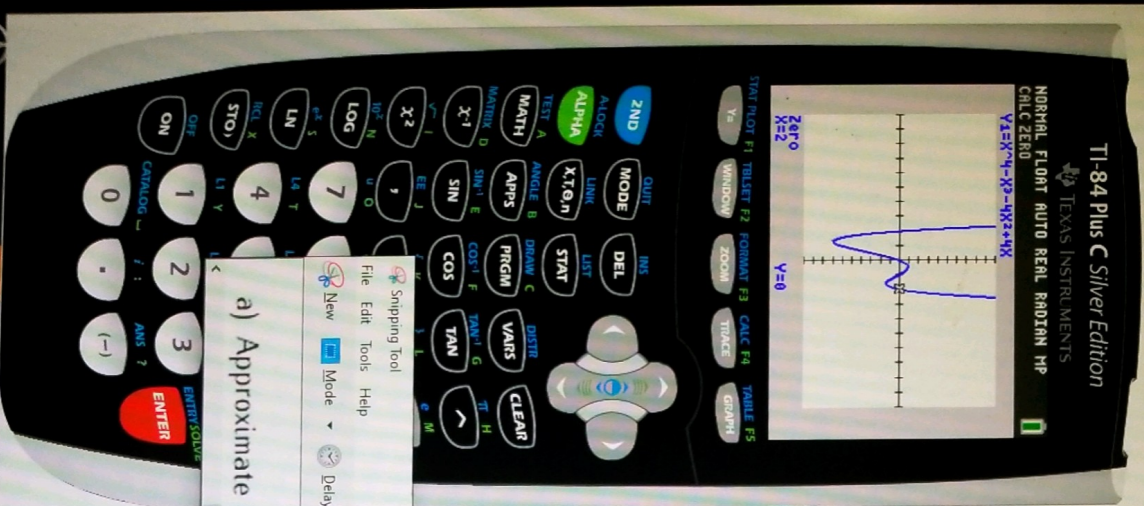
**CALC ZERO**

**Zero X=1**

**Y=0**

Show Key Press History



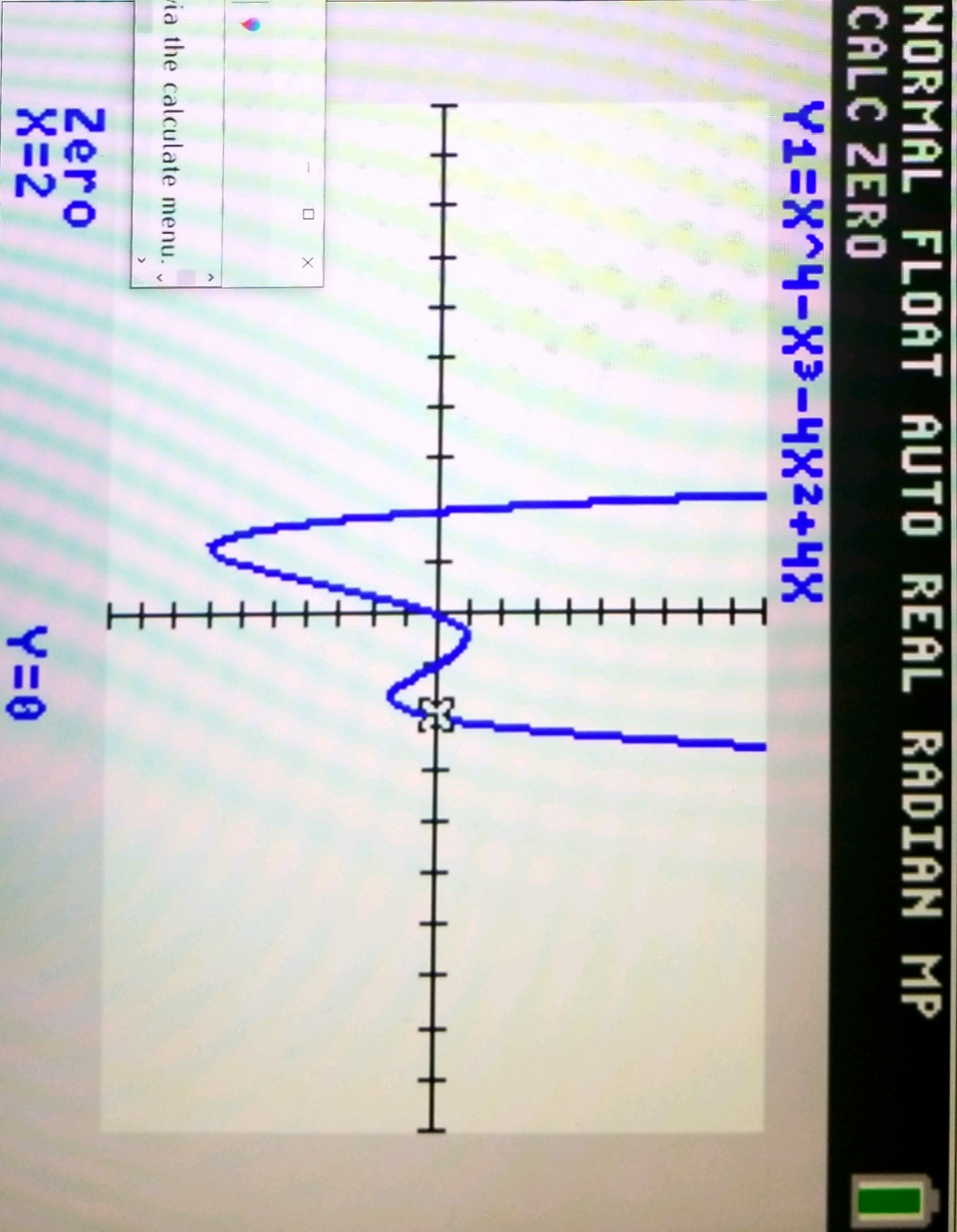


Snipping Tool  
 File Edit Tools Help  
 New Mode Delay  
 a) Approximate the zeros of the function via the calculate menu.

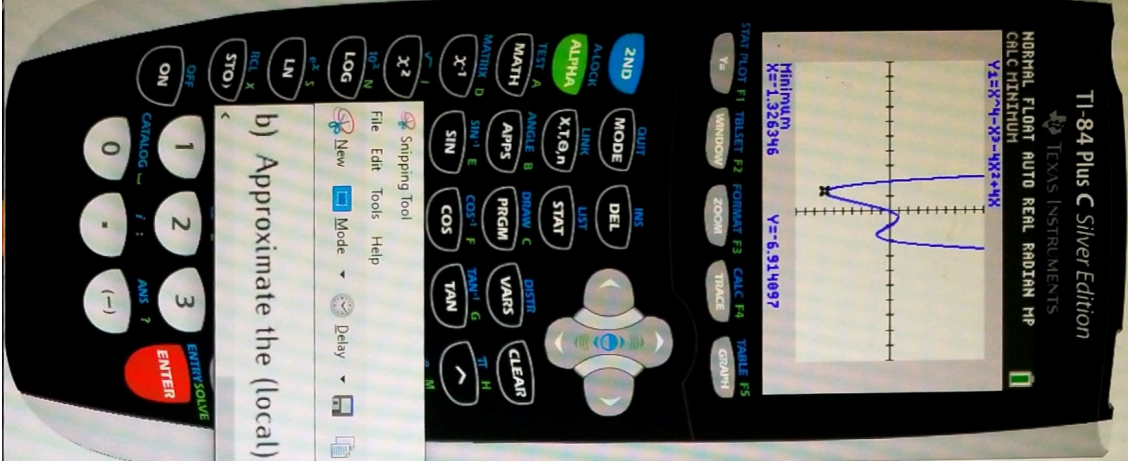
Point: Point: Point:  
 Equation  
 $Y_1 = X^3 - 4X^2 + 4X$   
 Table  

X	Y1
0	0
1	0
2	0
3	36
4	216
5	1250
6	7200
7	34300
8	158400
9	729000
10	3375000

 Graph







b) Approximate the (local) maxima and the minima via the calculator menu

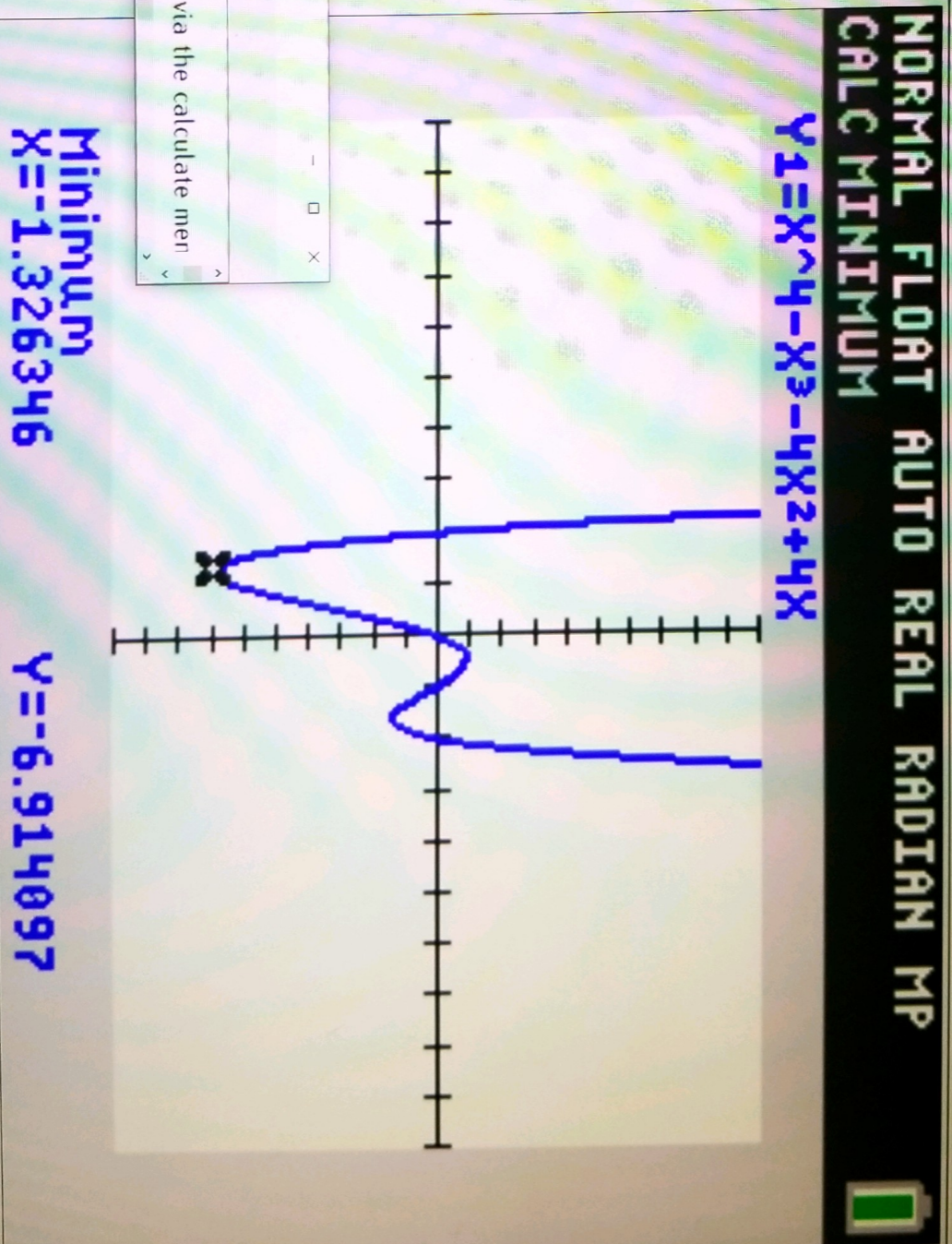
Plot1 Plot2 Plot3  
 Y1:  $X^3 - 4X^2 + 4X$

Equation  
 Y1 =  $X^3 - 4X^2 + 4X$   
 Y2 =  
 Y3 =  
 Y4 =  
 Y5 =  
 Y6 =  
 Y7 =

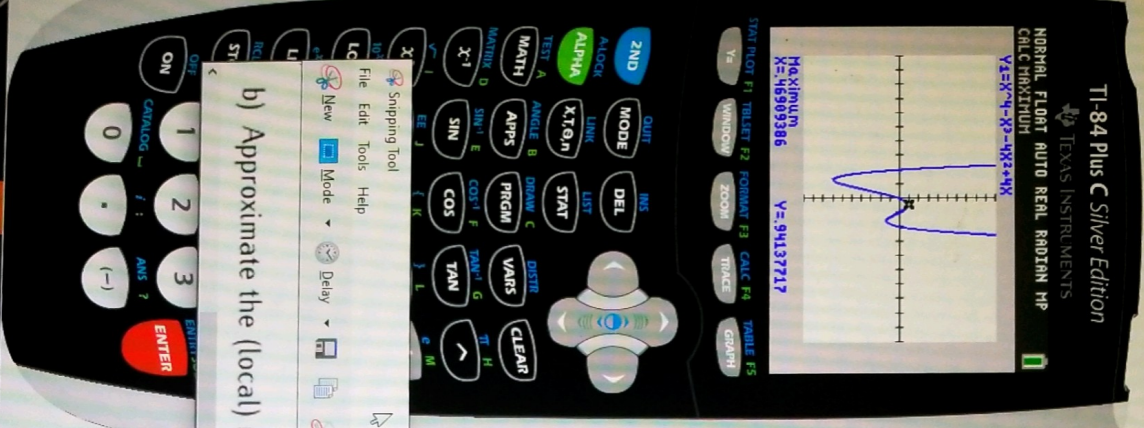
X	Y1
0	0
1	1
2	0
3	27
4	64
5	125
6	216
7	343
8	512
9	729
10	1000

Table  
 X=0

Graph







Normal Float Auto Real Radian HP

Plot1 Plot2 Plot3

Y1= X^3-4X^2+4X

Equation

X	Y1
0	0
1	0
2	0
3	36
4	144
5	460
6	1080
7	1856
8	2704
9	3576
10	4500

Table

Graph

b) Approximate the (local) maxima and the minima via the calculate me

Key Press History

Large Screen

Normal Float Auto Real Radian MP

Calc Maximum

$Y1=X^3-4X^2+4X$

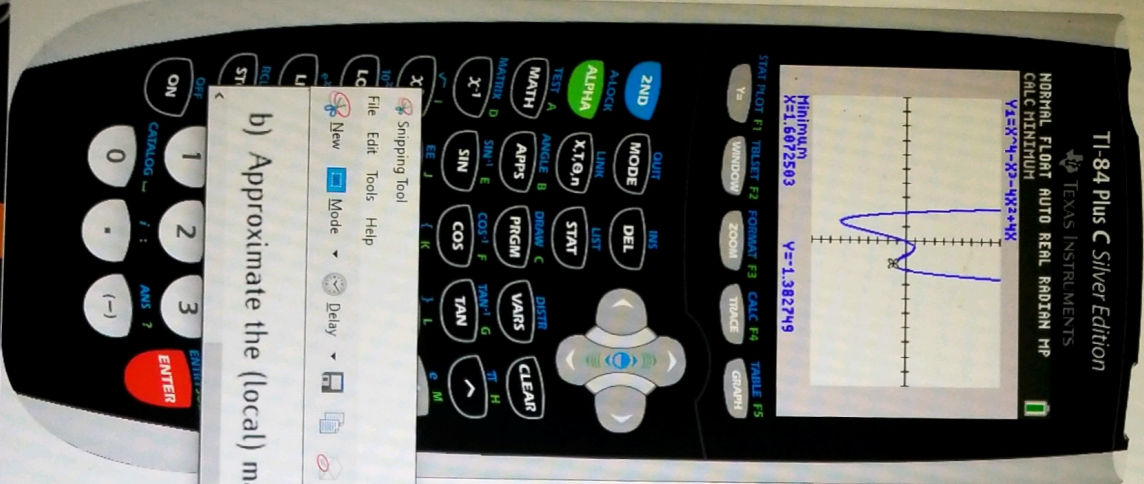
Maximum

X=.46909386

Y=.94137717

Show Key Press History





b) Approximate the (local) maxima and the minima via the calculator mer

Point Plot2 Plot43  
 $Y_1=BX^3-X^2+4X$

Equation  
 $Y_1=$   
 $Y_2=$   
 $Y_3=$   
 $Y_4=$   
 $Y_5=$   
 $Y_6=$   
 $Y_7=$

Table  

X	Y1
0	0
1	0
2	3.0
3	4.5
4	4.0
5	9.60
6	1.800
7	5.000
8	5.000
9	8.100
10	8.100

Graph

