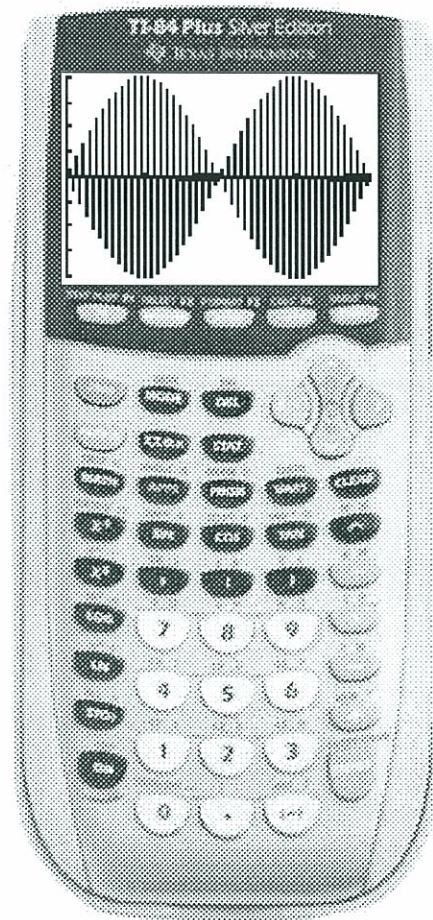


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***It Has To Be Right,  
That's What My Calculator "Says"!!!***



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If  $(\sqrt[n]{x})^n = x$ , then why isn't  $(\sqrt[7]{6})^7 - 6 = 0$ ?

```
(6^(1/7))^7-6
-1.6E-12
```

Let's use the *ZoomFit* command!  $f(x) = \tan(x)$

```
Plot1 Plot2 Plot3
Y1 tan(X)
Y2 =
Y3 =
Y4 =
Y5 =
Y6 =
Y7 =
```

```
WINDOW
Xmin=0
Xmax=3.1415926...
Xscl=.78539816...
Ymin=-10
Ymax=10
Yscl=1
Xres=1
```



```
MEMORY
4:ZDecimal
5:ZSquare
6:ZStandard
7:ZTrig
8:ZInteger
9:ZoomStat
ZoomFit
```

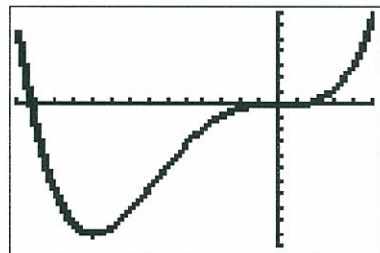


```
WINDOW
Xmin=0
Xmax=3.1415926...
Xscl=.78539816...
Ymin=-48756704...
Ymax=29.909988...
Yscl=1
Xres=1
```

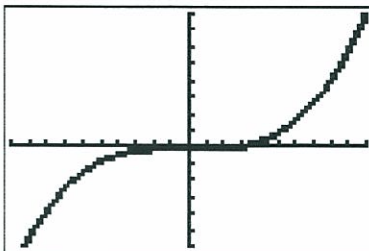
Locating roots!  $f(x) = 3x^4 + 40x^3 - 0.06x^2 - 1.2x$

```
Plot1 Plot2 Plot3
Y1 3X^4+40*X^3-
0.06*X^2-1.2*X
Y2 =
Y3 =
Y4 =
Y5 =
Y6 =
```

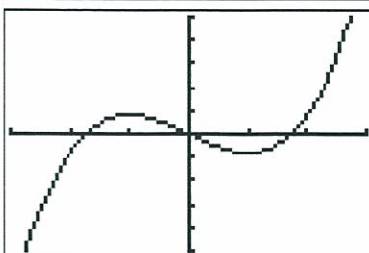
```
WINDOW
Xmin=-14
Xmax=5
Xscl=1
Ymin=-11000
Ymax=7000
Yscl=1000
Xres=1
```



```
WINDOW
Xmin=-1
Xmax=1
Xscl=.1
Ymin=-30
Ymax=40
Yscl=5
Xres=1
```



```
WINDOW
Xmin=-.3
Xmax=.3
Xscl=.1
Ymin=-.5
Ymax=.5
Yscl=.1
Xres=1
```



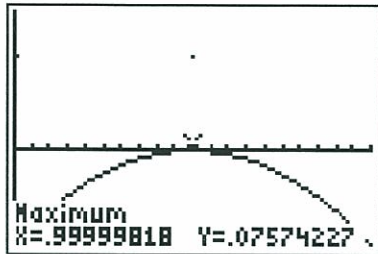
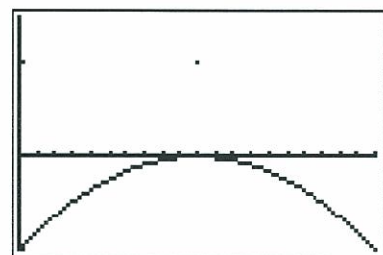
Locating relative extrema!  $f(x) = -(x-1)^2 - \frac{1}{1000(x-1)^{\frac{1}{3}} - 1}$

```

Plot1 Plot2 Plot3
\Y1=-(X-1)^2-1/(1
000*(X-1)^(1/3)-
1)
\Y2=
\Y3=
\Y4=
\Y5=
    
```

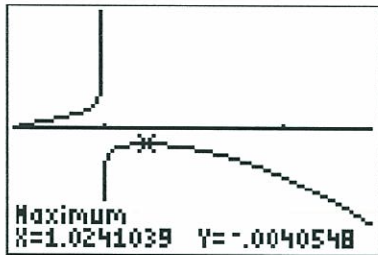
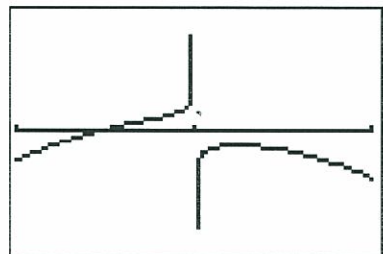
```

WINDOW
Xmin=0
Xmax=2
Xscl=.1
Ymin=-1
Ymax=1.5
Yscl=1
Xres=1
    
```



```

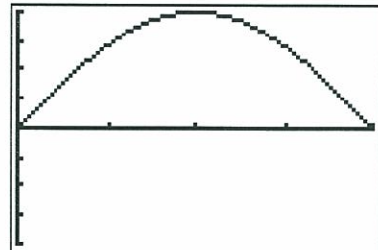
WINDOW
Xmin=.9
Xmax=1.1
Xscl=.1
Ymin=-.03
Ymax=.03
Yscl=1
Xres=1
    
```



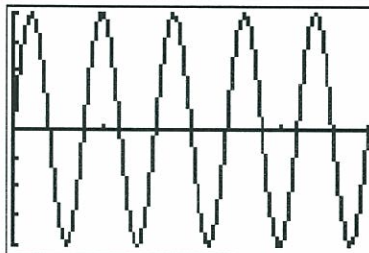
## Something *simple*, plotting a sine curve!

```
Plot1 Plot2 Plot3
Y1=sin( $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
Y7=
```

```
WINDOW
Xmin=0
Xmax=1
Xscl=.25
Ymin=-1
Ymax=1
Yscl=.25
Xres=1
```



```
Plot1 Plot2 Plot3
Y1=sin(10 $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
Y7=
```



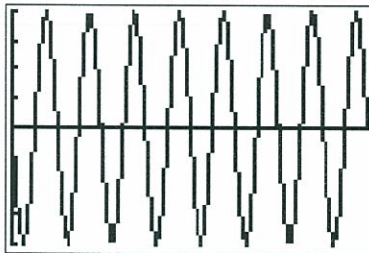
```
Plot1 Plot2 Plot3
Y1=sin(100 $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
Y7=
```



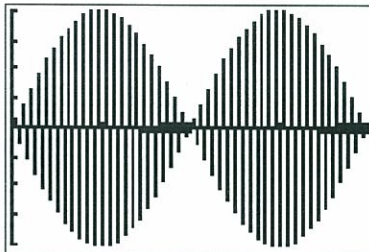
```
Plot1 Plot2 Plot3
Y1=sin(1000 $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
Y7=
```



```
Plot1 Plot2 Plot3
Y1=sin(10000 $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
```



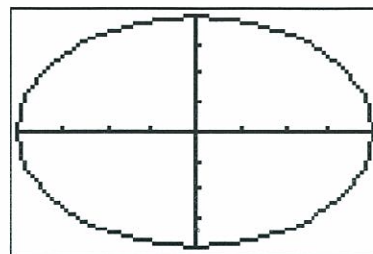
```
Plot1 Plot2 Plot3
Y1=sin(1000000 $\pi X$ )
Y2=
Y3=
Y4=
Y5=
Y6=
```



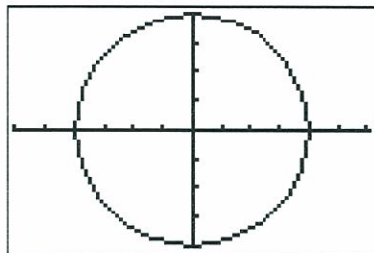
## Plotting a circle (?), parametrically!

```
Plot1 Plot2 Plot3
\X1T cos(T)
Y1T sin(T)
\X2T =
Y2T =
\X3T =
Y3T =
\X4T =
```

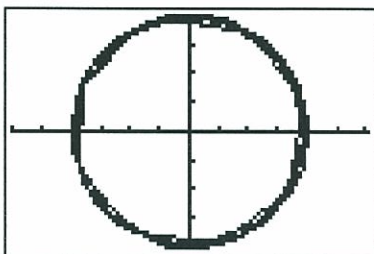
```
WINDOW
Tmin=0
Tmax=6.2831853...
Tstep=.3141592...
Xmin=-1
Xmax=1
Xscl=.25
↓Ymin=-1
```



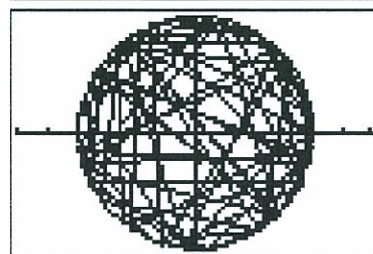
```
MEMORY
4↑ZDecimal
5ZSquare
6ZStandard
7ZTrig
8ZInteger
9ZZoomStat
0ZZoomFit
```



```
Plot1 Plot2 Plot3
\X1T cos(T^2)
Y1T sin(T^2)
\X2T =
Y2T =
\X3T =
Y3T =
\X4T =
```



```
Plot1 Plot2 Plot3
\X1T cos(T^3)
Y1T sin(T^3)
\X2T =
Y2T =
\X3T =
Y3T =
\X4T =
```



Numerical integration!  $\int_0^{\infty} e^{-x} dx = 1?$

```
fnInt(e^(-X),X,0
,10)
.9999546001
fnInt(e^(-X),X,0
,100)
1
```

```
fnInt(e^(-X),X,0
,10000)
3.19925594E-17
fnInt(e^(-X),X,0
,1000000)
0
```