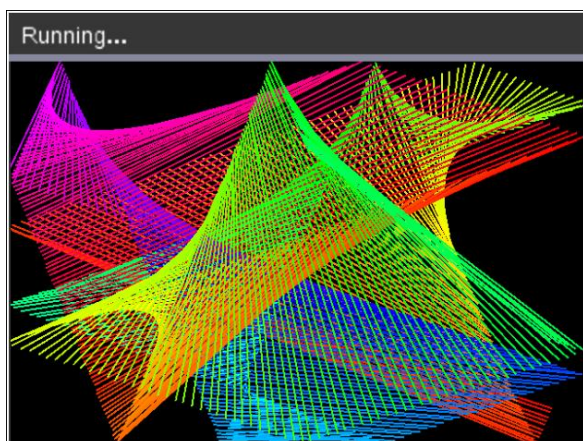
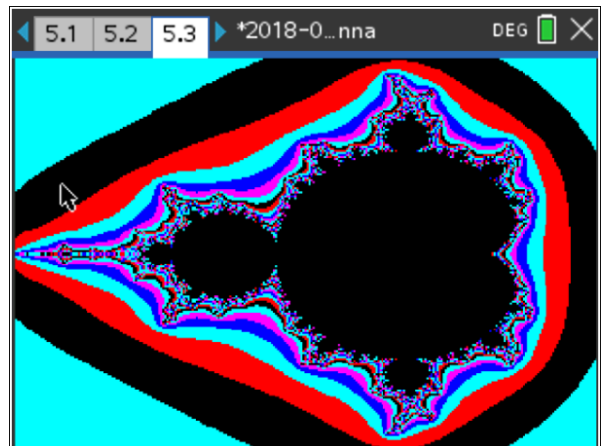
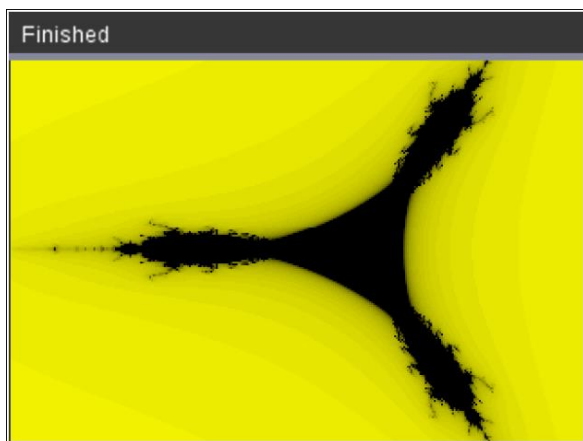
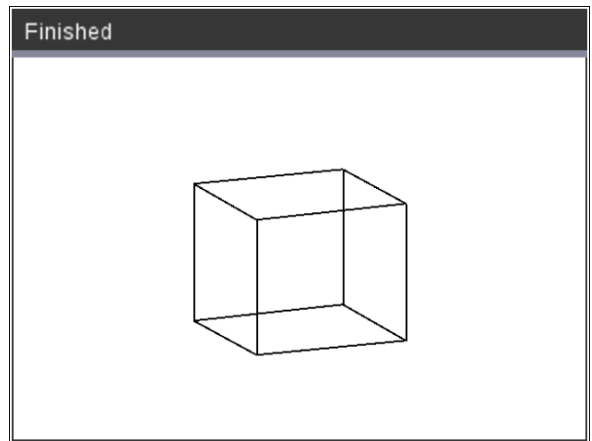
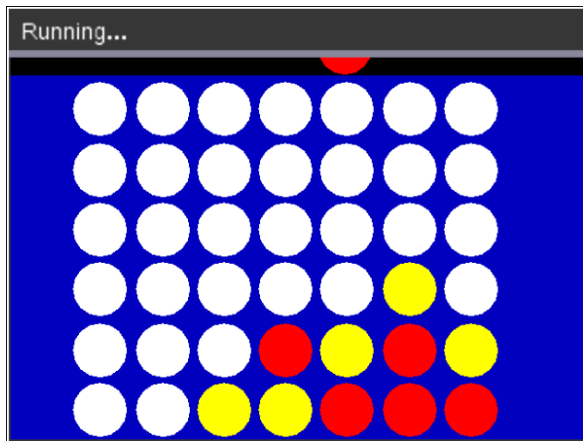


Learn to Draw

on TI-Nspire CX II with TI-Basic



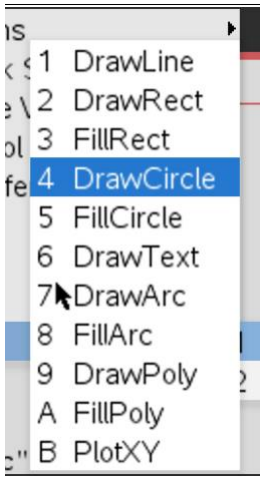
T³ International Conference

March 14, 2020

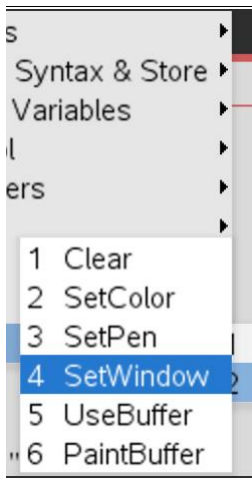
John E. Hanna

johnehanna@gmail.com

www.johnhanna.us



- **DrawLine** x1, y1, x2, y2
- **DrawRect** x, y, width, height
- **DrawCircle** x, y, radius
- **DrawText** x, y, "text" or var or expr
- **DrawArc** x, y, width, height, startangl, arcangl
- **DrawPoly** xlist, ylist
- **PlotXY** x, y, style - *style=1..13*

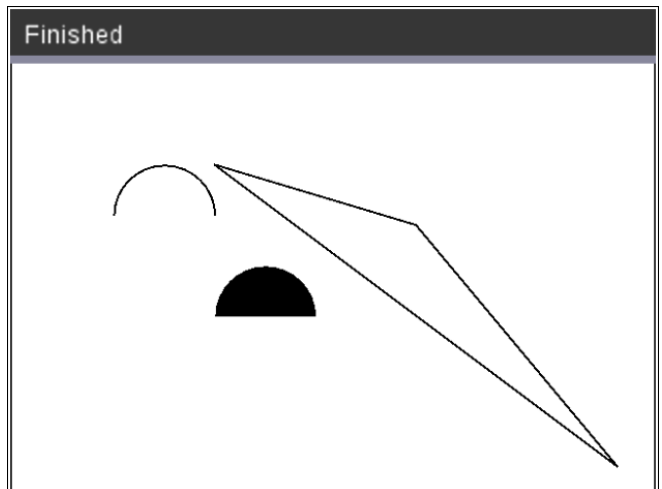


- **Clear** - *clear screen*
- **Clear** x, y, width, height - *clear region*
- **SetColor** red, green, blue - *0..255 each*
- **SetPen** thickness, style - *1..3 each*
- **SetWindow** xmin, xmax, ymin, ymax
- **UseBuffer** - *draw off-screen*
- **PaintBuffer** - *paint buffer ;)*

```

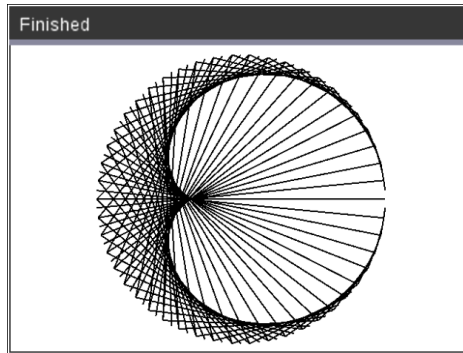
18.2 18.3 19.1 *2018-0...nna RAD
* drawtest 0/17
Define drawtest()=
Prgm
xlist:={ 100,200,300,100 }
ylist:={ 50,80,200,50 }
DrawPoly xlist,ylist
DrawArc 50,50,50,50,0,180
FillArc 100,100,50,50,0,180

```



T³ Australia Webinar by Peter Fox:

<https://www.youtube.com/watch?v=4ANjUXXjZRE>



Define stringart(p,n)=

Prgm

:UseBuffer

:For j,10,p

: s:=seq(x,x,0,j)

: x1:=100*cos(((s*360)/(j)))+159

: y1:=100*sin(((s*360)/(j)))+106

: sd:=mod(s*n,p)

: x2:=100*cos(((sd*360)/(j)))+159

: y2:=100*sin(((sd*360)/(j)))+106

:©SetColor 255-j,0,j

: Clear

: For i,1,j

: DrawLine x1[i],y1[i],x2[i],y2[i]

: EndFor

: PaintBuffer

: Wait 0.1

: If getKey(0)="esc":Stop

:EndFor

:EndPrgm

Some strategies for using getKey()

A loop that ends when [esc] is pressed:

```
While getKey(0) ≠ "esc"  
    <code>  
EndWhile
```



Reading and using the keypress:

```
key=""  
While key≠"esc"  
    If key="up" then  
        <up code>  
    Endif  
    If key="down" then  
        <down code>  
    Endif  
    <some more code>  
  
    key := getKey(0)  
EndWhile
```

Stopping a program when any key is pressed:

```
If getKey(0) ≠ "" : Stop
```

Put this statement in the innermost part of the program where it will be processed the most.

Wait for a keypress, esc to end:

```
key:=getKey(1)  
If key="esc" : Stop  
    <continue program>
```