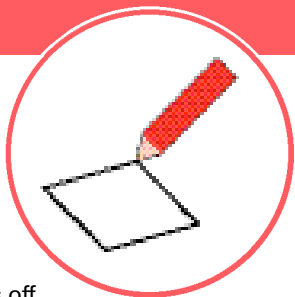


Coordinate Plane

In this exercise we will use the Pen feature of the TI-73 Explorer™ to draw geometric shapes in the coordinate plane.



Engage

1. Turn on your TI-73 Explorer and press $\boxed{Y=}$
2. Make sure that equations are empty and plots off
 - A. Clear equations from the $\boxed{Y=}$ menu by highlighting the first variable or constant in the expression, and then press clear
 - B. To turn plots off, press $\boxed{2nd} \boxed{Y=}$, select the plots that are *On* by highlighting the number, and then press $\boxed{ENTER} \boxed{\blacktriangledown}$ to *Off* and \boxed{ENTER}
3. Press \boxed{WINDOW} and enter the values shown in the WINDOW screen below
4. Press \boxed{GRAPH} , then \boxed{DRAW} . Move down with $\boxed{\blacktriangledown}$ until you find Pen, then press \boxed{ENTER}
5. The cursor is blinking at (0, 0) in the coordinate plane
6. Press \boxed{DRAW} , then $\boxed{1}$ for ClrDraw. This will clear the screen

Explore

1. Follow these steps to draw a figure:
 - A. Use $\boxed{\blacktriangleright}$ and $\boxed{\blacktriangleup}$ to move the cursor to the point (5, 10), and press \boxed{ENTER} (the pen is *DOWN* and ready to draw)
 - B. Move $\boxed{\blacktriangleup}$ to (5, 20). Then move $\boxed{\blacktriangleright}$ to (25, 20) and move $\boxed{\blacktriangledown}$ to (25, 10). Then move $\boxed{\blacktriangleleft}$ to return to the original vertex at (5, 10)
 - C. Press \boxed{ENTER} (the pen is *UP* and you can move about the screen)

Extend

1. Describe the shape and the location of the figure
2. What would a similar geometric shape look like?
 - a Write the characteristics of a similar shape on paper and then draw the shape on the coordinate plane with your original drawing
 - a Use the Pen feature to draw a square
 - a Use the Pen feature to find the coordinates of the point that is 5 to the left of and 20 up from (15, -11)

```
Plot1 Off
Type: L1 L2 L3 L4 L5 L6 L7 L8 L9 L0
@ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
Cate9List: COUN
DataList1: GOLD
DataList2: SILVE
DataList3: BRONZ
Mem Hor 1 2 3
```

```
STAT PLOTS
1: Plot1 On
   On Off COUN GOLD Y 3
2: Plot2 Off
   L1 L2
3: Plot3 Off
   L1 L2
4: Plots Off
```

```
WINDOW
Xmin=-47
Xmax=47
Xscl=10
Ymin=-31
Ymax=31
Vsc1=10
```

