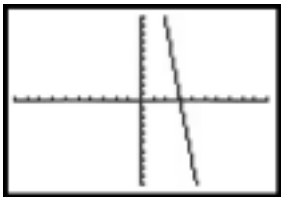
TI-83/TI-83 Plus Procedure 5: *Setting the Viewing Window*

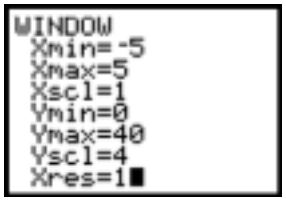
Example

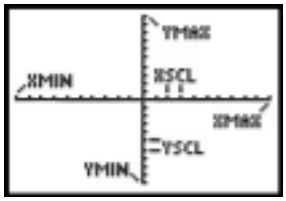
Graph the function $y = -8x + 25$ and adjust the viewing window to see more of the function.

STEP 1: Press Y= and enter the function $y = -8x + 25$. Use (–) for the negative sign, not − . Press ZOOM **6**. Note that you cannot see where the function crosses the *y*-axis.

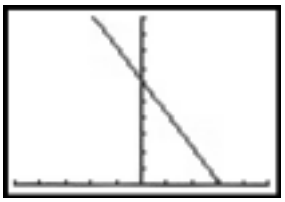


STEP 2: Examine the current WINDOW values by pressing WINDOW . Edit the value of **Xmin** by pressing (–) **5**. Press ▼ or ENTER to move to the next value. Set the remaining WINDOW values using the following key sequence: **5** ▼ **1** ▼ **0** ▼ **40** ▼ **4**. Compare your screen with the one on the left. The screen on the right shows which aspect of the viewing window each WINDOW value controls. The value **Xres** appears underneath **Yscl**. **Xres** determines the thickness (from 1 to 8) of the lines and axes when they are drawn on the screen. For the best results, leave **Xres** set at 1.





STEP 3: Press GRAPH to view the screen below.



Exercises

Set the viewing window to each set of values to graph the function $y = 4x^2 + 11x$.

1. Xmin = –5 Ymin = –8
   Xmax = 1 Ymax = 1
   Xscl = .5 Yscl = 1

2. Xmin = –4 Ymin = –10
Xmax = 1 Ymax = 10
Xscl = 1 Yscl = 2

3. Xmin = –10 Ymin = –10
Xmax = 10 Ymax = 300
Xscl = 1 Yscl = 25