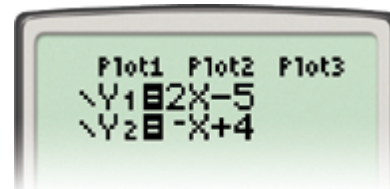


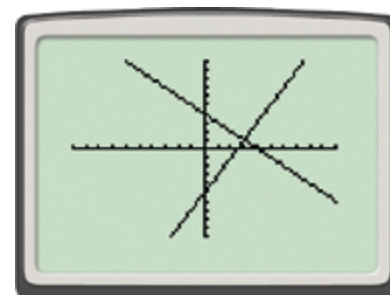
6-1 Solving Systems by Graphing

You will need a graphing calculator for this Exploration.

1. Press **Y=** and enter the equations $y = 2x - 5$ and $y = -x + 4$ as **Y1** and **Y2**.
2. Press **2nd** **TABLE** **GRAPH** to view a table of values for the two equations.
3. Use the table to find an x -value that produces the same y -value for both equations. Write this x -value and the corresponding y -value as an ordered pair.
4. Use the arrow keys to scroll up and down the table. Does there appear to be any other x -value that produces the same y -value for both equations?
5. Press **GRAPH** to view a graph of the equations.



X	Y1	Y2
0	-5	4
1	-3	3
2	-1	2



THINK AND DISCUSS

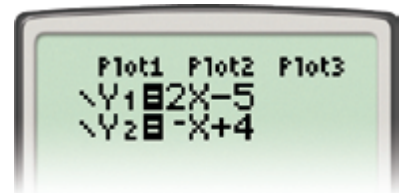
6. **Describe** the graph of the functions.
7. **Explain** what happens on the graph at the point that you found in Step 3.

EXPLORATION

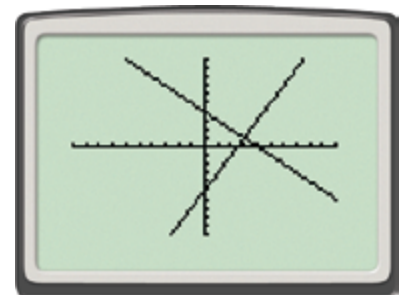
6-1 Solving Systems by Graphing

You will need a graphing calculator for this Exploration.

1. Press **Y=** and enter the equations $y = 2x - 5$ and $y = -x + 4$ as **Y1** and **Y2**.
2. Press **2nd** **TABLE** **GRAPH** to view a table of values for the two equations.
3. Use the table to find an x -value that produces the same y -value for both equations. Write this x -value and the corresponding y -value as an ordered pair. **(3,1)**
4. Use the arrow keys to scroll up and down the table. Does there appear to be any other x -value that produces the same y -value for both equations? **no**
5. Press **GRAPH** to view a graph of the equations.



X	Y1	Y2
0	-5	4
1	-3	3
2	-1	2



THINK AND DISCUSS

6. **Describe** the graph of the functions. **two intersecting lines**
7. **Explain** what happens on the graph at the point that you found in Step 3. **The lines intersect at (3, 1).**