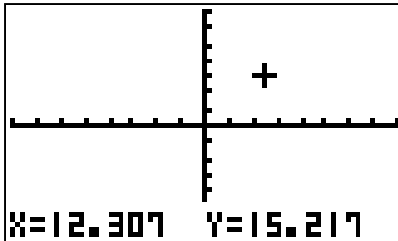


Plotting Points with the *fx-7400G PLUS* A Pre-Algebra Activity

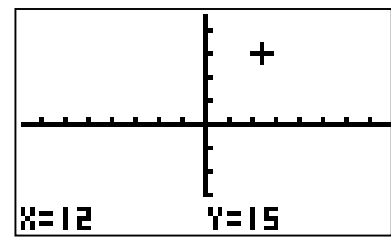
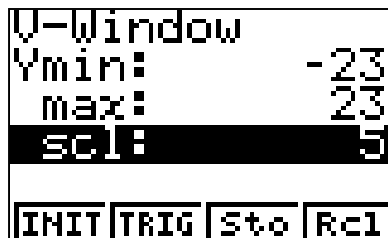
Plot the ordered pairs (12, 15), (4, 19), (-18, 30), (26, -9), and (-15, -29) on your graphing calculators.

Let's begin by setting an appropriate viewing window. (Have students suggest possible windows. After discussing possibilities, have them set a window [-40, 40] by [-35, 35] with a scale of 5.)

On the MENU screen, choose RUN. Press Shift F4 (SKTCH), F3 (PLOT), F1 (Plot) 12, 15 EXE. Ask your students why they think $X = 12.307$ and $Y = 15.217$ appear at the bottom of the screen. Discuss the pixels.



Ask them to change the window to [-39, 39] by [-23, 23] with a scale of 5. Now have them plot (12, 15). Ask them to explain the difference.



They can use the arrow keys to move the cursor to the next point and press EXE to plot. The cursor will return to the original point (12, 15) each time. When they work on the exercises below, (0, 0) is the first point in each set.

Have students clear the screen by pressing Shift F4 (SKTCH), F1 (Cls), EXE.

Exercises: Graph each set of points, clearing the screen after each exercise.

1. $(0, 0)$, $(-17, 18)$, $(5, -16)$, $(-12, -8)$, $(20, 20)$, $(-3, -15)$ Is this set of points a function? Why or why not?
2. $(0, 0)$, $(-35, 20)$, $(17, 17)$, $(-35, -20)$, $(-17, -17)$ Is this set of points a function? Why or why not?
3. Choose a different viewing window and repeat exercise # 2. Did you encounter any problems? Clear the screen and try another viewing window.
4. Explain in your own words why we chose this viewing window for this activity.