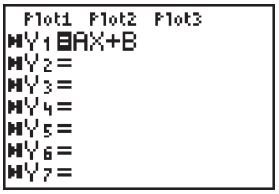
Transformation Graphing App

TI-84 Plus

This App helps students improve graphing comprehension. By simply inputting functions, students can view changes in the function as the parameters change. This means they have a visual diagram of the function, allowing them to visually draw conclusions.

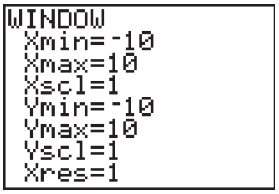
1

In the Apps menu, use ▲ ▼ to highlight Transfrm, and press [ENTER]. Press any key.



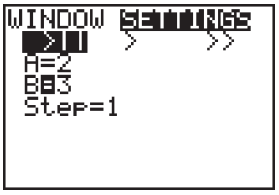
2

Press [Y=]. In Y1, enter AX+B. Press [ALPHA] [A] [X,T,Θ,n] [+] [ALPHA] [B], the equation for a general linear function.



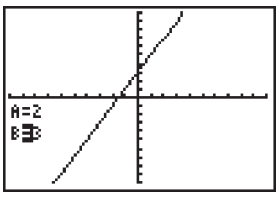
3

Press [WINDOW] and make the following changes as needed, using the arrow keys to navigate:
Xmin = -10
Xmax = 10
Xscl = 1
Ymin = -10
Ymax = 10
Yscl = 1



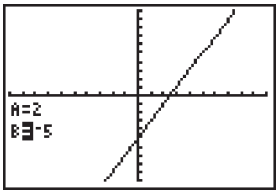
4

To set some initial conditions for the function (define A and B), press [WINDOW] and cursor ▶ to highlight SETTINGS. Scroll ▼ until the cursor is flashing on the value for A. Press [2]. This will set the initial value of A to 2. Scroll ▼ again until the cursor is flashing on the value for B. Press [3]. This sets the initial value of B to 3. At this point, STEP = 1 (don't worry about this right now).



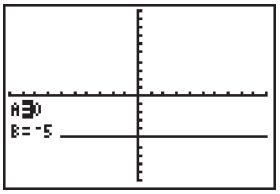
5

Press [GRAPH]. The function 2x+3 appears on the screen as well as one solution, A=2 and B=3.



6

From this screen, change the value of B by 1 by pressing ◀ ▶ (change the function to y=2X+2, y=2X+4, etc. Remember on a previous screen, STEP = 1? That was the change in value of the highlighted variable each time). Using ◀ ▶, explore what happens to the function when the value of B changes.



7

Explore what happens to the function when the value of A changes. Using ▲ ▼, highlight A. Then use ◀ ▶ to change the value of A in STEPS of 1.