

Writing Equations of Lines Teacher

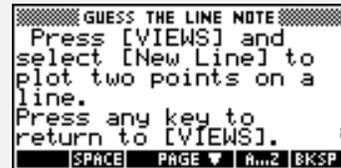
For the

Objectives:

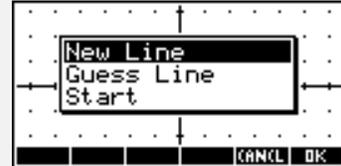
Using the **GUESS THE LINE** applet, the student will write the equation of a line in slope-intercept form when given two points.

Functionality:

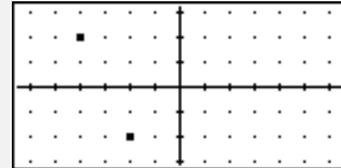
When the student presses **START**, the **GUESS THE LINE NOTE** will be displayed.



The student should then press **VIEWS** to access the options of this applet.



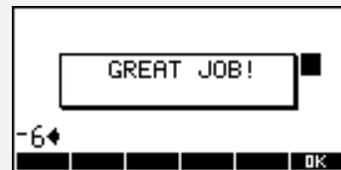
New Line will randomly plot two ordered pairs. The student should write the equation of the line in slope-intercept form that passes through these points. Pressing any key will bring back the views menu.



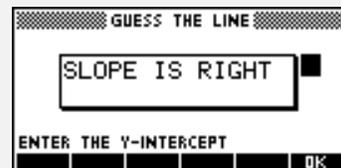
Guess Line will prompt the student for the slope and the y-intercept of the line that contains these points.



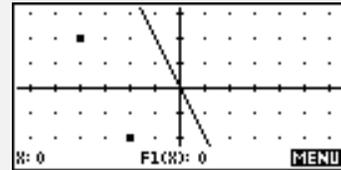
If the student enters the correct slope and y-intercept, the calculator returns a message that says **GREAT JOB!**



If the student enters an incorrect piece of information, the calculator returns a message that specifying the correct information.



After the message box, the original points and the student's line will be displayed. The student may then guess again. Pressing **VIEWS** will bring back the menu.

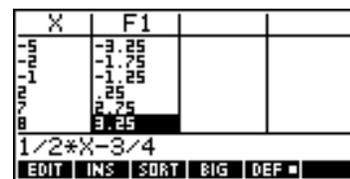
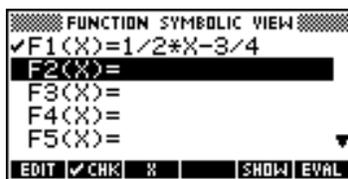


Additional Exploration:

Use the **Build Your Own** feature in the numeric setup of the **Function** applet to have students create a table of x and y values for a given line. An example would be:

Complete the table for $y = \frac{1}{2}x - \frac{3}{4}$.

x	y
-5	
-2	
-1	
2	
7	
8	



Ideas can be applied to:
Prealgebra, Algebra I, Algebra II

Programs associated with this applet:
.LI.NL, .LI.GL, .LI.ST, .LI.SV