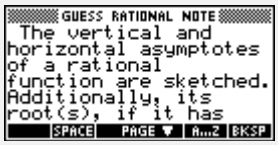
Writing Rational Functions — For the Teacher

Objectives:

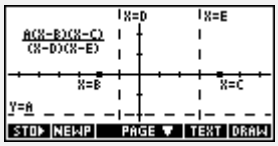
Using the **GUESS RATIONAL** aplet, the student will write the equation of a rational function given horizontal and vertical asymptotes and a root.

Functionality:

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

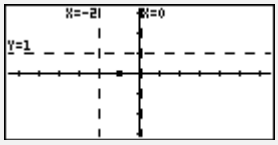


After reading the note, the student should press **SKETCH** for further explanation.

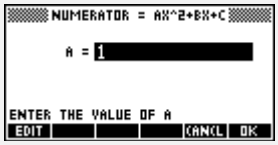


VIEWS allows the student to select a new problem, enter the rational function, vertically zoom to see a complete graph, or view the problem.

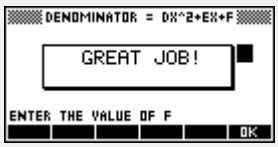
New Problem displays a graph with horizontal and vertical asymptotes and a root for the student to write the rational function that has these characteristics.



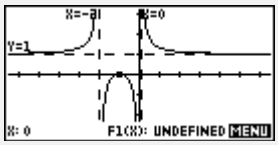
Guess Function prompts the user to enter the coefficients & constants of the numerator & denominator of the function.



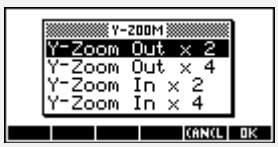
After entering the rational function, a message box will display the status of the entered information. **GREAT JOB!** indicates the function is correct. **NUMERATOR IS CORRECT**, **DENOMINATOR IS CORRECT**, or **NEITHER IS CORRECT** could also be displayed



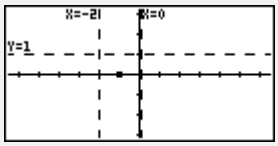
After the message box, the graph of the student's rational function will be plotted on the original problem for comparison purposes.



In the event that a complete graph is not seen,
Y-Zoom allows the student to vertically zoom in or out by a factor of 2 or 4.



See Problem allows the student to view the problem again if needed.



Programs associated with this aplet:
.GRAT.GR, .GRAT.NP, .GRAT.GA, .GRAT.YZ, .GRAT.SP, .GRAT.ST, .GRAT.SV