

Multiplication with Area Models

Teacher

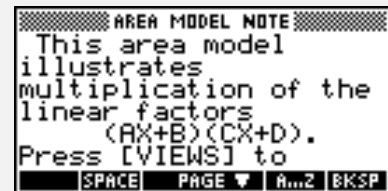
For the

Objectives:

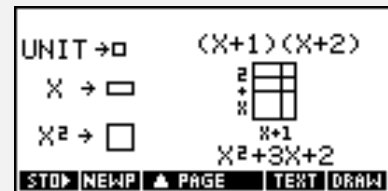
Using the **AREA MODEL** applet, the student will multiply first degree monomials and binomials.

Functionality:

When the student presses **START**, the **AREA MODEL NOTE** will be displayed.



The student should then view the **SKETCH** for a visual explanation.



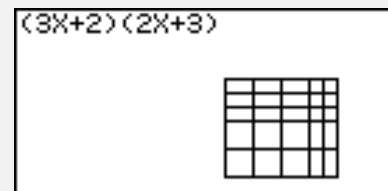
After viewing the note and sketch, **VIEWS** should be pressed to adjust the coefficients and constants, to view the area model, and to expand.



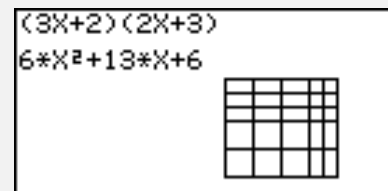
Adjust A, B, C, D prompts the student, through a series of adjust boxes, to enter values for A, B, C, and D in the expression $(Ax+B)(Cx+D)$.



View Area displays the expression and the area model.



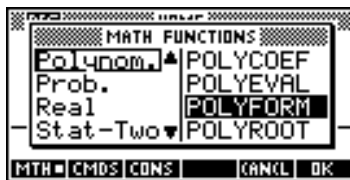
Expand displays the solution to the multiplication shown with the area model.



Additional Exploration:

At the HOME screen, use POLYFORM to expand. POLYFORM can be typed in the edit line or can be found by pressing **MATH** , **P** . The syntax for this command is `POLYFORM(expression, variable)`. An example would be:

Expand $(x+2)(2x-1)$



Ideas can be applied to:

Prealgebra, Algebra I, Algebra II

Programs associated with this applet:

.AR.E, .AR.D, .AR.AB, .AR.SV