

FunctionWizard[©] User Manual

Polynomial Addition, Subtraction, Multiplication and Division:

The FunctionWizard user interface allows you to enter polynomials of your choice and either multiply, subtract, add, or divide the polynomials. At the top of the window, you will find two text boxes where you can input the first and second polynomial. Polynomials should be entered by entering each term in this form: “ $4x^2+2x-7$ ”. The leading coefficient of the term is entered first, then the letter x, then the carat symbol and then finally the exponent. Terms should be entered with no blank spaces in between the “+” or “-” signs in order of descending exponents. In between the two textboxes is a drop-down menu that allows you to choose which operation you would like to apply to the polynomials. Once you have entered the two polynomials and the operation you would like to conduct, simply hit the compute button above the drop-down menu. To the right of the text boxes, you will find the answer that the program has calculated.

Graphing Polynomials:

Towards the bottom of the screen, you will find a button that is labeled “Graph Polynomial”. To graph a polynomial, enter the polynomial which you would like to graph in the textbox where it says “Enter your First Polynomial”. Then click the “Graph Polynomial” button. After you have clicked this button, the graph should appear in the graphing window. You may repeat this process for as many polynomials as you would like.

Finding the Roots

To find the roots of a Polynomial, simply enter the polynomial in the text box below the description “Enter a polynomial here to find the roots”. Once you have entered the polynomial into the textbox, click the “find roots” button and the roots should appear in the lower right corner of the main screen.

Finding the Derivative

Drag the circle icon on the derivative slider bar to see all the derivatives of the polynomial.