Polynomial Toolbox User Manual

This document will instruct you on how to use the Polynomial Toolbox.

Upon starting the Polynomial Toolbox, you will be greeted by an interface with a several boxes near the top of the program window for polynomial input.

To input a polynomial of your choosing, follow these steps:

- Use the Add/Remove Term buttons to choose how many polynomial terms you'd like
- Use the spinners and drop menus for term input to choose the term's coefficient, degree and positivity/negativity
- Repeat the previous step for all terms in the polynomial that you wish to add
- Press "change colour" to choose the colour that the function will be represented with on the graph
- Press the "Add" button to finalize your polynomial and add it to the polynomial list

Note that a maximum amount of terms that can be added is 5, with the maximum degree of any term being 10. Once inputted, your polynomial will be displayed on a list on the left side of the program window. This list will collect all of the polynomials that you will input during your program session. Polynomials on this list can be selected.

Polynomials can be interacted with in a number of ways. One way to interact with polynomials is to apply operations to them. The Polynomial Toolbox allows you to add, subtract, multiply and divide any two polynomials by calling them within the program.

A graph of any particular function is displayed in the middle of the program window. Note that only one function - the selected one - may be graphed at any given time. You are able to click and drag this window to view different parts of the graphed function. You can also use your mouse wheel to zoom in and out of the graph display. Moreover, you will be able to hover your cursor over functions at a given point in order to display a tangent line to that function at a given point.

Information pertaining any given function is displayed at the bottom of the program window. To access information on a function, select it on the function list on the left side of the screen.