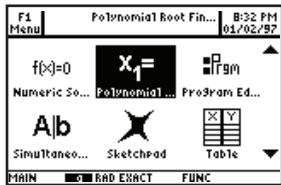
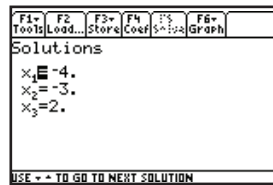


# Polynomial Root Finder App

This App calculates real and complex roots for polynomials up to degree 30 using eigenvalues. In addition, polynomials can be easily graphed.



**1**  
To enter the Polynomial Root Finder App, press the [APPS] key, highlight “Polynomial” and press [ENTER].



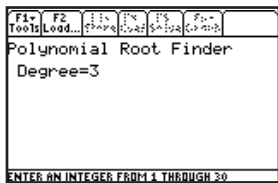
**5**  
To find the roots, press [F5] “Solve.” To toggle between the coefficients and solution, use [F4] and [F5].



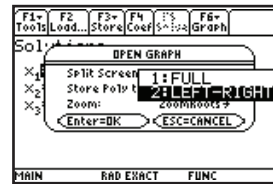
**2**  
Select “3: New. . .” by using the down arrow and pressing [ENTER], or by pressing [3].



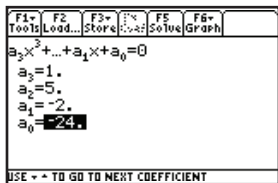
**6**  
To see the graph of this polynomial, select [F6] “Graph.” To access [F6], press [2nd], followed by [F1], because [F6] is above [F1] in blue. Press [ENTER] while “1: Open Graph” is highlighted, or press [1].



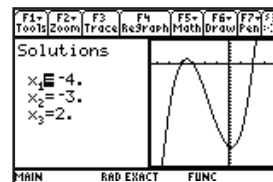
**3**  
Use the example below. First, enter the degree of the polynomial by pressing [3], then [ENTER].  
 $x^3 + 5x^2 - 2x - 24 = 0$



**7**  
The graph can be viewed as a split screen (graph on one half, solutions on the other), or as a full screen. Select the desired option by highlighting the “Split Screen” field, then pressing the right arrow key to activate the options. Press [ENTER] to change, then [ENTER] again to graph.



**4**  
Type each numerical coefficient, followed by [ENTER]. Be sure to use the negative key [-] vs. the subtraction key.



**8**  
The graph shown is not part of the Polynomial Root Finder App. It is part of the Graph portion of the calculator. Notice how the [F1] through [F7] functions at the top of the screen have changed. To return to the Polynomial Root Finder App, press [2nd], then [APPS] to access the toggle function.

**9**  
To quit the Polynomial Root Finder App, press either [APPS] to return to the icon screen, or [2nd], [ESC] to access the “QUIT” command.