**ZEROS OF A FUNCTION OF 4th ORDER (QUARTIC EQUATION) v1.02**

The program find the solutions of a quartic function given as

y(x) = **A**\*x**4** + **B**\*x**3** + **C**\*x**2** + **D**\*x + **E** = 0

and depicts the curve in the graph-screen. The results may be real and/or complex.

Load **FNCQUART** to the calculator and start the program.

On the following prompts enter successively the numerical coefficients for **A**, **B**, **C**, **D** and **E**. (These data are stored in List **L**C). After the last input the program switches to the graph screen and presents the curve and the solutions x**1**, x**2**, x**3**, x**4**.

***EXAMPLE 1***: Find the roots of:

y = 5\*x**4** + 7\*x**3** - 4\*x**2** +2\*x - 10 = 0

Start **FNCQUART**, then key in 5 and press [enter] for **A**.

Repeat this step for **B**: 7 [enter], **C**: -4 [enter],

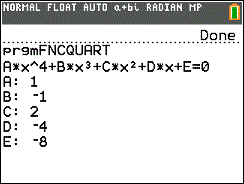
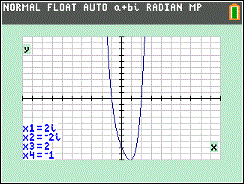
**D**: 2 [enter], **E**: -10 [enter].

Be sure to use the (-) – key, not the – key for mathematical operation!

The graph-screen opens and displays the curve and the result:

x**1** = 1; x**2** = -2.09216; x**3**,**4** = -0.15392 +/- 0.9655353***i***

***EXAMPLE 2***:

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