Math 1414
College Algebra
Lab Exercise # 2
Fort Hood
Instructors Name: _____

Name: _____ Date:_____

Section: _____ Semester: _____

Grade: _____

Attach computer printouts to this sheet and submit your assignment to your instructor.

2a. Use the TI-83 calculator to graph the polynomial function $y = (3x+2)^2(x-1)(4x-7)$. (Print)

2b. Describe the end behavior of the graph from 2a. and verify your observations using the leading coefficient test.

2c. List the x and y intercepts of the graph in 2a.

2d. State the degree of the polynomial in 2a. and list the real zeros of the polynomial function.

2e. Use the TI-83 calculator and the trace key to estimate the relative minimum of the polynomial in 2a. that occurs between x = 0 and x = 2 to the nearest tenth. (Print)

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*****If in doubt, Print it out!!*****

2a) If you have forgotten how to graph an equation, refer back to Lab #1. It is not necessary to multiply the factors. Put them in the calculator as you see them. You will need to adjust the window in order to graph the equation.

2b) No guidance needed. Use your textbook.

2c) No guidance needed. Use your textbook.

2d) No guidance needed. Use your textbook.

2e) Using the Trace key will not give an accurate answer. Try touching [2^{nd}] [TRACE] (CALC), then 3:minimum. In the lower left hand corner, the calculator displays "Left Bound?" You have to tell the calculator where the left side of the minimum is. The calculator thinks there are more then one minimum. You have to narrow down where the one is you want to see. You do this by telling the calculator where the left and right bounds are. Use arrow keys to show where the left bound is. Touch [ENTER]. Now the calculator wants to know where the Right Bound is. Arrow over to it and touch [ENTER] again. The calculator now wants a guess. Touch [ENTER] (no guess necessary). The minimum is now displayed. Be sure to round the appropriate number of decimals.