

Please do, and turn in, the first part by yourself. You may work in groups of two or three on the program.

Using the shift-and-add algorithm for multiplication, multiply the following. "Shift" the left-hand operand "right" and the right-hand operand "left". Check your work by multiplying the normal way. Show your work.

$$29 * 48$$

$$74 * 12$$

$$39 * 15$$

$$18 * 73$$

Write a MIPS program to evaluate the polynomial $4x^3 + 2x^2 - 5x + 3$. Initialize a variable x and load x into a register to use in the calculations. Store the result in a memory location called y , then retrieve y to print with a short description like "result = ". Use Horner's method to evaluate the polynomial. Test by changing the value in x and re-running.