

A game with numbers.

The problem is very simple: Imagine we draw 6 numbers and a number to generate with the other six with simple mathematical operators +, -, x, and /. Write a program to solve this problem.

For example: 10, 1, 5, 7, 2, and 25 to generate 99.

In the simple version of the program it has to check if a solution exists. The serious version of the program has to show the answer, for example

99 = (((10+1)\*5+7)\*2-25)

Hints:

Use a recursive method, for example:

FUNCTION FindSolution(parameters): Boolean

Which calls itself. We start calling it with our 6 numbers and the function will perform an operation and call itself with the remaining 5 numbers, and so on. It will return TRUE when the number is found, or FALSE otherwise.

Start by writing a program which only checks if a solution exists. Later change the program so that it also shows the solution.