

Algorithm Description – Triangle Times

In plain English, point-form, think through the steps necessary to solve the given problem.

Make use of key words like *compare*, *iterate*, *store*.

In code, of course, these translate to conditional statements, loops, and using variables.

Algorithm

INPUT:

- Collect all 3 angles (good case for using a function)
 - Iterate until valid input for each angle is received
 - Show the prompt
 - Get the input
 - Check whether it is an integer
 - Check whether it is in the range 1 to 178 (inclusive)
 - Store the provided value

PROCESS:

- Store an empty string in a “result” variable to track type of triangle
- Check whether angles have a sum of 180
 - If so...
 - Check whether all three angles are the same
 - If so, store “equilateral” in “result” variable
 - If not...
 - Check whether any pair of the three angles given are the same
 - If so, store “isosceles” in “result” variable
 - If not...
 - Store “scalene” in “result” variable
 - If not...
 - Store “error” in “result” variable

OUTPUT:

- Print contents of “result” variable to screen