# 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 three inputs
  + Iterate until valid input received
    - Show the prompt
    - Get the input
    - Check whether it is an integer
      * Check if it is in the valid input range (1-178 inclusive)
        + Store the angle’s value

Process/Output

* Compare angles to each other
  + If the sum of all angles is more than 180 print error
  + If all angles are the same, print “Equilateral” example angle 1 = 60 angle 2 = 60 angle 3 = 60
  + If two angles are the same, print “Isosceles” example angle 1 = 50 angle 2 = 50 angle 3 = 80
  + If all angles are different, print “Scalene” example angle 1 = 80 angle 2 = 60 angle 3 = 40
  + If none of these conditions apply, print “error”
  + Angle range is 1-178
  + If angle isn’t within this range prompt for the angle again until an accepted value is inputted
  + If the value inputted is a string then prompt the user for the same angle again