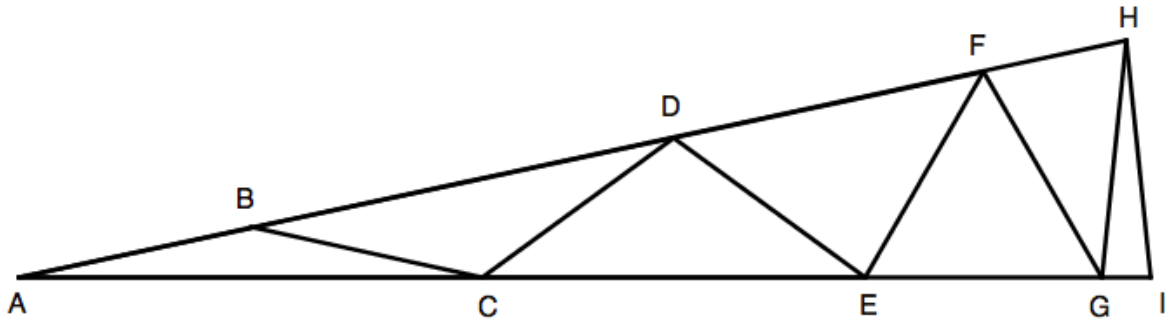


$AHI$  is an isosceles triangle:



Within the triangle are seven other isosceles triangles:  
 $ABC, BCD, CDE, DEF, EFG, FGH, GHI$ .

The eight line segments  $AB, BC, CD, DE, EF, FG, GH, HI$  are equal in length.

**Calculate the three angles of the isosceles triangle  $AHI$ .**

### Extension:

Can you construct similar isosceles triangles, made up of a number of smaller isosceles triangles, in which the angles are all whole numbers?

If the isosceles triangle is composed of  $n$  isosceles triangles, and angle  $BAC = x$ , what are the values of the other angles of the triangle?