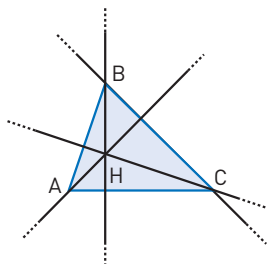


YOU & MATHS **Multiple orthocentres** Draw a triangle ABC and its orthocentre H . Draw the orthocentre of triangles ABH , BCH , ACH .

Here are triangle ABC and its orthocentre.



Let us focus on triangle AHC . We can show that B is its orthocentre since:

- the line through B and H is perpendicular to AC ;
- the line through B and A is perpendicular to the extension of CH , because this contains the altitude of the triangle to BA .

In the same way we can prove that A is the orthocentre of BCH and C is the orthocentre of ABH .