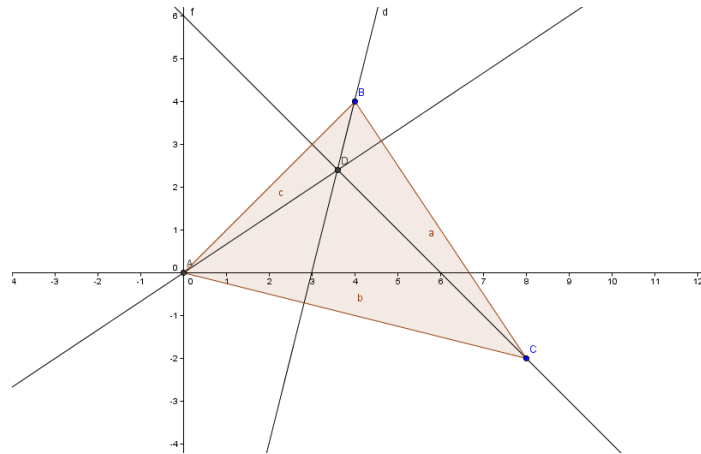




# Altitudes in a triangle & the orthocenter

Open your GeoGebra-file with the triangle ABC and the altitudes.



We already found out that the three altitudes intersect in a single point, called the **orthocenter** of the triangle.

Try to answer the following questions. Take notes in your portfolio!

- When does the orthocenter lie **inside** the triangle?
- When **outside** the triangle?
- What happens in a **right triangle**?
- Do you notice anything extraordinary in an **isosceles triangle**?

**HINT**

Drag the vertices A, B and C to change the form of your triangle and see what happens with the orthocenter! It may be helpful to plot the angles of the triangle.

Have Fun 😊