## **Example 1: Circumcircle of a Triangle**



**Task**: Construct a triangle A, B, C and its circumcircle using GeoGebra.

## **Construction Using the Mouse**

## Preparations

• Open the *Perspectives* menu and select *Geometry*.

## **Construction Steps**

1		Choose the tool <i>"Polygon"</i> from the toolbar. Now click on the graphics view three times to create the vertices <i>A</i> , <i>B</i> , and <i>C</i> . Close the triangle by clicking on point <i>A</i> again.
2	$\times$	Next, choose the tool <i>"Perpendicular Bisector"</i> (click on the small arrow at the fourth icon from the left) and construct two line bisectors by clicking on two sides of the triangle.
3	$\times$	Using the tool <i>"Intersect Two Objects"</i> you can click on the intersection of both line bisectors to get the center of your triangle's circumcircle. To name it <i>"M"</i> , right-click on it (Mac OS: ctrl-click) and choose <i>"Rename"</i> from the appearing menu.
4	ullet	To finish your construction, choose the tool <i>"Circle with center through point"</i> and click first on the center, then on any vertex of the triangle.
5	$\searrow$	Using the <i>"Move"</i> tool you can now use the mouse to drag the triangle vertices around - your construction will change dynamically with them.