Triangle Sum Theorem

Prerequisites and Objectives

- ► Students are familiar with the terms triangle and angle.
- ► Students assume by means of a dynamic construction that the sum of the measures of the angles of a triangle is 180°.
- ► They prove the triangle sum conjecture by use of alternate interior angles.

sketchometry

The students should know

► how to draw a triangle,



- how to tag an angle,
- how to measure angles and the sum of angles,

Measure > Measure > tap an angle and place the measurement on the board

Measure > Calculations > \(\begin{aligned} \sum > \text{tap areas or measurements} \) tap the board at a free spot

how to draw a line parallel to a given line segment.



Further Exploration

► Determine the sum of the interior angles of a quadrilateral. Hint: Try to use your knowledge about the triangle sum.