## 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 $180^{\circ}$.
- 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 > tap the board at a free spot to place the measurement

Measure > Sum > tap angles or measurements > ...

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



## Further Exploration

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

