

Sum of the Angles of a Triangle

In these activities we will explore the sum of the angles of a triangle.

Activity 1. Tear and Join

1. Mark the angles of the paper triangle with a letter, or using different colors, or different marks. Tear the triangle with your hands (don't cut it with scissors) in three parts in such a way that each part has one of the angles.

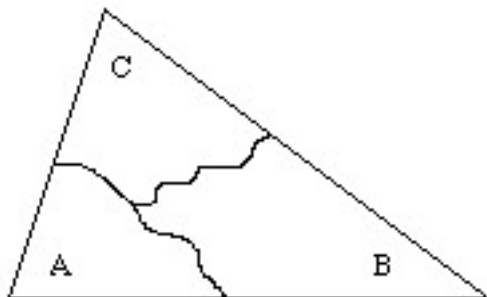


Figure 1. The triangle is torn in three parts

2. Reassemble the three parts so that the three angles are adjacent to each other and their vertices coincide in a point.

- *What do you observe?*
- *Look around you and observe what other participants obtained.*
- *You will observe that the three angles together form a straight line, as shown in figure 2.*

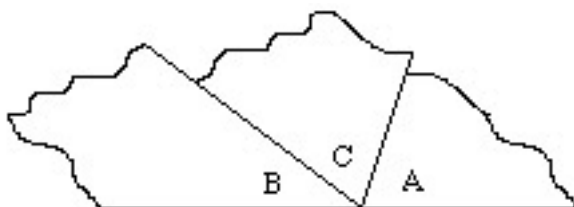


Figure 2. The three angles together

3. Remember that a straight line can be formed by two right angles, so the angle measure of a straight line is 180° . This experiment shows that the sum of the angles of your triangle is 180° , and also for the triangles of the other participants.