Abstract

This thesis summarizes not only most of the basic components and qualities of a triangle but it also brings pieces of information about triangles which are not usually taught at elementary and high schools. The aim of the thesis is to make readers acquainted with those components and to show differences between them. There are solved constructional and arithmetical problems in the last chapter. These problems utilize relations described in the thesis. The topic of these relations goes beyond mathematical curriculum of high schools. A part of the thesis is made of pictures to imagine better the terms described and the relations of components. All of the pictures are designed in a geometrical program called GeoGebra.

Key words: triangle, side, angle, altitude, median, area, perimeter.