

Properties of Bicentric Quadrilaterals

Ozturk, Mehmet (School: Gazi University Foundation Private Science High School)

In this project, the properties of the bicentric quadrilaterals were examined. Bicentric quadrilaterals are quadrilaterals, which have both a circumcircle and incircle. For this reason, they have all the properties of a cyclic quadrilateral and a tangential quadrilateral. The different properties of bicentric quadrilaterals were investigated by known mathematicians such as Nicolaus Fuss, Henrich Dörrie, Martin Josefsson, J.C. Salazar, Paul Yiu. In this project, the area formulas of the bicentric quadrilaterals and of the bicentric deltoids have been proven by new ways.