

Theorem Proving Components in GeoGebra

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Abstract

The talk reviews recent enhancements in GeoGebra concerning automated theorem proving (ATP). They are the Relation tool, allowing the discovery of simple properties between construction objects, the Prove and ProveDetails commands, returning the truth values of geometric statements, and the LocusEquation command, finding necessary hypotheses for the truth of conjectural assertions. Through selected examples, abilities and current limitations of these tools will be illustrated. Furthermore, ongoing efforts towards the extension of real ATP in Geogebra will be discussed.