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On Constructive-Deductive Method For Plane Euclidean Geometry

Constructive-deductive method for plane Euclidean geometry is proposed and formalized within Coq Proof Assistant. This method includes both postulates that describe elementary constructions by perfect geometric tools (pencil, straightedge and compass), and axioms that describes properties of basic geometric figures (points, lines, circles and triangles). The proposed postulates and axioms can be considered as a constructive version of the Hilbert's formalization of Euclidean geometry.