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Symmetric sextics in the real projective plane and auxiliary conics. (English. Russian original)

Zbl 1077.14088

J. Math. Sci., New York 119, No. 1, 78-85 (2004); translation from Zap. Nauchn. Semin. POMI 279, 154-167 (2001).

A real plane algebraic curve is called symmetric if its complexification is invariant with respect to a real holomorphic involution of the plane. The paper is devoted to a simple geometric proof for the known classification of real non-singular symmetric sextic curves in the plane. The authors' approach consists in the use of auxiliary lines and conics to show the triviality of the monodromy group, which is an obstruction for the existence of a symmetric curve in the given isotopy class. Existing symmetric sextics are obtained by means of the patchworking construction.

Reviewer: Eugenii I. Shustin (Tel Aviv)

MSC:

14P25 Topology of real algebraic varieties
14H37 Automorphisms of curves

Keywords:

real plane algebraic curve; monodromy group; patchworking construction

Full Text: DOI