

ABSTRACT. In this article we give a simplified set of axioms for mathematical origami and numbers. The axioms are hierarchically structured so that the addition of each axiom, allowing new geometrical complications, is mirrored in the field theory of the possible constructible numbers. The fields of Thalian, Pythagorean, Euclidean and Origami numbers are thus obtained using this set of axioms. The other new ingredient here relates the last axiom to the algebraic geometry of pencils of conics. It is hoped that the elementary nature of this article will also be useful for advanced algebra students in understanding more of the relations of field theory with elementary geometry.