

1. Record Nr.	UNINA9910791742603321
Autore	I Aglom I. M (Isaak Moiseevich), <1921-1988, >
Titolo	Geometric transformations . III / / by I.M. Yaglom ; translated from the Russian by A. Shenitzer [[electronic resource]]
Pubbl/distr/stampa	Washington : , : Mathematical Association of America, , 1973
ISBN	0-88385-939-4
Descrizione fisica	1 online resource (viii, 237 pages) : digital, PDF file(s)
Collana	Anneli Lax new mathematical library ; ; 24
Disciplina	516.5
Soggetti	Geometry, Modern - Plane Geometry Transformations (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 02 Oct 2015).
Nota di contenuto	Contents -- Translator's Preface -- From the Author's Preface -- Introduction. What is Geometry? (Final Essay) -- Chapter I. Affine and Projective Transformations (Affinities and Projectivities) -- 1. Parallel projection of a plane onto a plane : Affine transformations of the plane -- 2. Central projection of a plane onto a plane : Projective transformations of a plane -- 3. Central projections which carry a circle into a circle: Stereographic projections -- 4. Reciprocation (polarity) of the plane : Principle of duality -- 5. Projective transformation of a line and a circle : Straightedge construction -- Supplement -- Non-Euclidean Geometry of Lobachevsky-Bolyai (Hyperbolic Geometry) -- Solutions -- Chapter One. Affine and projective transformations -- Supplement. Hyperbolic geometry.
Sommario/riassunto	This book is the sequel to Geometric Transformations I and II, volumes 8 and 21 in this series, but can be studied independently. It is devoted to the treatment of affine and projective transformations of the plane these transformations include the congruencies and similarities investigated in the previous volumes. The simple text and the many problems are designed mainly to show how the principles of affine and projective geometry may be used to furnish relatively simple solutions of large classes of problems in elementary geometry, including some straight edge construction problems. In the Supplement, the reader is introduced to hyperbolic geometry. The latter part of the book consists

of detailed solutions of the problems posed throughout the text.
