Record Nr. UNINA9910460754103321 Autore Kay David C. Titolo College geometry: a unified development / / by David C. Kay Boca Raton, FL:,: CRC Press, an imprint of Taylor and Francis,, 2011 Pubbl/distr/stampa **ISBN** 0-429-10919-9 1-4398-9522-8 Edizione [First edition.] Descrizione fisica 1 online resource (641 p.) Textbooks in Mathematics Collana Disciplina 516.0076 Soggetti Geometry Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Contents; Preface; Author; Chapter 1 - Lines, Distance, Segments, and Rays; Chapter 2 - Angles, Angle Measure, and Plane Separation; Chapter 3 - Unified Geometry: Triangles and Congruence; Chapter 4 - Quadrilaterals, Polygons, and Circles; Chapter 5 - Three Geometries; Chapter 6 - Inequalities for Quadrilaterals: Unified Trigonometry; Chapter 7 - Beyond Euclid: Modern Geometry; Chapter 8 - Transformations in Modern Geometry; Chapter 9 - Non-Euclidean Geometry: Analytical Approach; Appendix A: Sketchpad Experiments; Appendix B: Intuitive Spherical Geometry Appendix C: Proof in GeometryAppendix D: The Real Numbers and Least Upper Bound; Appendix E: Floating Triangles/Quadrilaterals; Appendix F: Axiom Systems for Geometry; Solutions to Selected Problems; Bibliography; Back Cover Sommario/riassunto Designed for mathematics majors and other students who intend to teach mathematics at the secondary school level, College Geometry: A Unified Development unifies the three classical geometries within an axiomatic framework. The author develops the axioms to include Euclidean, elliptic, and hyperbolic geometry, showing how geometry has real and far-reaching implications. He approaches every topic as a

fresh, new concept and carefully defines and explains geometric

principles.