1. Record Nr. UNINA9910160316003321 Autore Berggren J.L Titolo Episodes in the Mathematics of Medieval Islam / / by J.L. Berggren New York, NY:,: Springer New York:,: Imprint: Springer,, 2016 Pubbl/distr/stampa **ISBN** 9781493937806 Edizione [2nd ed. 2016.] 1 online resource (266 pages): illustrations, maps Descrizione fisica 510 Disciplina Soggetti Mathematics History History of Mathematical Sciences Popular Science in Mathematics History of Science History Arab countries Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface -- 1. Introduction -- 2. Islamic Arithmetic -- 3. Geometrical Constructions in the Islamic World -- 4. Algebra in Islam -- 5. Trigonometry in the Islamic World -- 6. Spherics in the Islamic World --Index. Sommario/riassunto This book presents an account of selected topics from key mathematical works of medieval Islam, based on the Arabic texts themselves. Many of these works had a great influence on mathematics in Western Europe. Topics covered in the first edition include arithmetic, algebra, geometry, trigonometry, and numerical approximation; this second edition adds number theory and combinatorics. Additionally, the author has included selections from the western regions of medieval Islam—both North Africa and Spain. The author puts the works into their historical context and includes numerous examples of how mathematics interacted with Islamic

society.