

1. Record Nr.	UNINA9910254069203321
Autore	Barbeau Edward <1938->
Titolo	University of Toronto Mathematics Competition (2001–2015) // by Edward J. Barbeau
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-28106-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (VIII, 207 p. 5 illus., 1 illus. in color.)
Collana	Problem Books in Mathematics, , 0941-3502
Disciplina	510.79
Soggetti	Functions of real variables Geometry Group theory Differential equations Real Functions Group Theory and Generalizations Ordinary Differential Equations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Preface -- 1. Problems of the Contests -- 2. Algebra -- 3. Inequalities -- 4. Sequences and Series -- 5. Calculus and its Applications -- 6. Other Topics in Analysis -- 7. Linear Algebra -- 8. Geometry -- 9. Group Theory -- 10. Combinatorics and Finite Mathematics -- 11. Number Theory -- Appendix A: Definitions, Conventions, Notation, and Basics -- Appendix B: Top-Ranking Students -- Index. .
Sommario/riassunto	This text records the problems given for the first 15 annual undergraduate mathematics competitions, held in March each year since 2001 at the University of Toronto. Problems cover areas of single-variable differential and integral calculus, linear algebra, advanced algebra, analytic geometry, combinatorics, basic group theory, and number theory. The problems of the competitions are given in chronological order as presented to the students. The solutions appear in subsequent chapters according to subject matter. Appendices recall some background material and list the names of students who did well. The University of Toronto Undergraduate Competition was

founded to provide additional competition experience for undergraduates preparing for the Putnam competition, and is particularly useful for the freshman or sophomore undergraduate. Lecturers, instructors, and coaches for mathematics competitions will find this presentation useful. Many of the problems are of intermediate difficulty and relate to the first two years of the undergraduate curriculum. The problems presented may be particularly useful for regular class assignments. Moreover, this text contains problems that lie outside the regular syllabus and may interest students who are eager to learn beyond the classroom.
