Competition Name	Description	Website
Alberta High School Mathematics Competition	2 parts; Nov. and Feb.; Awards scholarships, cash, books to winners	http://www.math.ualberta.ca/~ahsmc/
American Invitational Mathematics Examination	AMC 12 students who rank in the top 5% nationally (or score at least 100) will qualify for the American Invitational Mathematics Exam (AIME). AMC 10 students who rank in the top 1% nationally (or score at least 120) will also qualify for the AIME. A very difficult contest of 15 questions, the AIME is often looked for in university applications by American Universities. All problems on the AIME can be solved by pre-calculus methods.	http://www.unl.edu/amc/e-exams/e7-aime/aime.shtml
American Mathematics Competition 12	The AMC has become almost standard in university applications to top engineering schools such as MIT in the United States. Therefore, if you are a math/science student interested in applying to American Universities, you should definitely look into this contest. Although much more difficult than its Canadian counterpart, the AMC is rewarding and is also scored on a scale of 150. A score of 100+ is usually considered very solid. The AMC 12 is the third of the open AMC exams.	http://www.unl.edu/amc/e-exams/e6-amc12/amc12.shtml

Competition Name	Description	Website
Canadian Computing Competition	The CCC is a programming contest organized by University of Waterloo. Its problems are largely mathematical, and it requires logical thinking skills. It has two divisions, each with two stages. The senior division covers topics like string manipulation, recursion, optimization, simulation, geometry, enumeration, sorting, searching, graph search, and dynamic programming. The junior division covers topics like selection, repetition, arrays, recursion, data structures, and string manipulation. Stage 1 is a preliminary stage, and is open to everyone. You are allowed to use almost any programming language supported by your school for this stage. Stage 2 is invitational-only (i.e. if you do well in Stage 1). You are only allowed C, C++, Pascal, and Java for this stage.	**http://www.cemc.uwaterloo.ca/ccc/index.shtml**
Canadian Kangaroo Math Contest	Canada became a member of the International Association "Kangourou sans frontières" in October 2006. This competition is an international competition held in many different countries.	**http://www.math.concordia.ab.ca/kangaroo/**
Canadian Math Olympiad	Arguably one of the most prestigious mathematics competitions that one can write, the CMO is very difficult to qualify for but will recognize exceptional mathematical talent.	**http://www.math.ca/Competitions/CMO/**

Competition Name	Description	Website
Euclid Mathematics Competition	University of Waterloo. The paper is 2.5 hours in length, and consists of 10 questions, each worth 10 marks, for a total of 100 marks. Questions are divided into answer only and full solution parts with no multiple choice questions. Competitors are reminded that marks for the full solution questions are assigned for form and style of presentation, as well as for answers. TOPICS Most of the problems will be based on the mathematics curriculum up to and including the final year of secondary school. The paper may include questions based on the topics listed below: • Euclidean and analytic geometry • Trigonometry, including functions, graphs, identities, sine and cosine laws • Exponential and logarithmic functions • Functional notation • Systems of equations • Polynomials, including relationships involving the roots of quadratic and cubic equations, the remainder theorem • Sequences and series • Simple counting problems • Properties of numbers	**http://cemc.math.uwaterloo.ca/english/index.shtml**

Competition Name	Description	Website
Galois Mathematics Competition	University of Waterloo. This math contest is 75 minutes in length consisting of four problems ranging from easy to difficult. The four problems also require a full written solution. The contest is marked out of a total of 40. MATHEMATICAL CONTENT: The Contest Committee ensures that most of the problems require only concepts found in the curriculum common to all provinces. Rather than testing content, the problems test logical thinking and mathematical problem solving. AWARDS AND COMPETITION: Every student who writes the Fryer, Galois or Hypatia Contest will receive a Certificate of Participation. The top 25% of the competitors in each of the three Contests are divided into three categories: Gold Standard, Silver Standard and Bronze Standard, in the ratio 1 : 2 : 3, and receive Gold, Silver and Bronze Certificates accordingly.	http://cemc.math.uwaterloo.ca/english/index.shtml
International Olympiad in Informatics	The International Olympiad in Informatics (IOI) is one of the most recognized computer science competitions in the world. In a nutshell, it is the Olympics of programming. The competition tasks are of algorithmic nature; however, the contestants have to show such basic IT skills as problem analysis, design of algorithms and data structures, programming and testing.	http://www.ioinformatics.org
Math League	This contest is unique in that it is only 6 questions and 30 minutes long, and is administered 6 times a year. The total score is then considered to award top scorers.	http://www.topcoder.com/tc?module=Static&d1=hs&d2=home

Competition Name	Description	Website
Siemens Westinghouse Competition in Math, Science & Technology	US citizens only. The Siemens Westinghouse Competition is open to all senior high school students who would like to submit an original science and math research project. You may enter as an individual (if you will be a senior in September), or as part of a team of two or three students (note: it is not necessary to have seniors on the team).The Siemens Westinghouse Competition in Math, Science & Technology recognizes remarkable talent early on, fostering individual growth for high school students who are willing to challenge themselves through science research. Through this competition, students have an opportunity to achieve national recognition for science research projects that they complete in high school.Students may submit research reports either individually or in teams of two or three members. Impartial panels of research scientists from leading universities and national laboratories judge the reports in the initial blind reading.Students whose projects are selected for further competition, are invited to give an oral and poster presentation at one of the six regional events hosted by partner universities. At each of these regional competitions an individual and a team are selected as Regional Winners. These students receive scholarships and invitations to advance to the National Competition in Washington, D.C.Note: Siemens scholarship may be used for any part of a student's post high school education including books, tuition, room and board, etc.Successful competition participants may apply for valuable internships at Siemens operating companies.	http://www.siemens-foundation.org

Competition Name	Description	Website
INTEL International Science and Engineering Fair (ISEF)	Participating in Intel ISEF provides a pathway to science innovation and self discovery. Students begin by developing a science research project and participating in their local Intel ISEF affiliated science fair. They learn to collaborate with others and articulate their scientific findings through projects	www.intel.com/cd/corporate/education/emea/eng/uk/elem_sec/comp_awards
Canadian Association of Physicists (CAP) Exam	CAP administers Secondary School Prize Examinations in the provinces across Canada. The exam is normally held during the first half of April each year. The CAP High School Prize examination has been in existence for many years and has been taken by many thousands of students at the end of their high school physics education. Many university scholarships and admissions committees have used the results in their decisions.	www.cap.ca/en/activities/medals-and-awards/prizes

Competition Name	Description	Website
Western Canada Physics Olympiad	The principal objectives of the Western Canada Physics Olympiad program are: • to select from Western Canada potential members of the Canadian team to compete at the International Physics Olympiad • to support bright young high school physicists and give them the chance to interact with their peers and university researchers and students.	www.phys.ualberta.ca/olympiad