

Alberta High School Mathematics Competition

The A.H.S.M.C. is an annual mathematics competition for high school students in Alberta. Students in junior high schools or in the North West Territories may also apply to write. All students register through their schools with the A.H.S.M.C. Board. A general announcement is sent out to all high schools in Alberta at the beginning of October, calling for registration. This is not done on line. The students write the contest in their own schools. Calculators are not allowed.

The A.H.S.M.C. consists of two Rounds. The First is open to all eligible students. There is a fee of \$2 per student for the first 30 students from the same school. Beyond that, the fee drops to \$1 per student. Payment may be made by cheque or credit card. Cheques should be made payable to the University of Alberta, the host of the A.H.S.M.C. Board.

The First Round is an 80 minute paper, consisting of 16 multiple-choice questions. Unless otherwise announced, it is held in the morning of the third Tuesday of November. The school must start the contest between 8:30 and 9:30. The top three students in each school constitutes the School Team. Book prizes are awarded for both Individual and Team Contests.

Students in the top 50 of the First Round are invited to write the Second Round. The top five Grade 10 students, if not already in the top 50, will also be invited. For each group of 20 students from the same school writing the First Round, the school may nominate an extra candidate for the Second Round. The final group does not have to be complete, provided that the school enters a team in the First Round. Thus a school with seven participants in the First Round can nominate one extra student for the Second. The fee is \$5 per nomination. This does not apply to candidates who qualify through the First Round.

The Second Round is a 3 hour paper, consisting of 5 problems requiring full solutions. Unless otherwise announced, it is held from 9:00 am to 12:00 noon on the first Wednesday of February. Fellowships are awarded based on performances in the Second Round.

Sponsors

ConocoPhillips Canada of Calgary

Peter H. Denham Memorial Fund of Edmonton

A K Peters, Publishers, of Wellesley, Massachusetts

Greenwoods' Bookshoppe of Edmonton

Canadian Mathematical Society

Pacific Institute for the Mathematical Sciences

Mathematics Council, Alberta Teachers' Association

Department of Mathematics and Statistics, University of Calgary, and

Department of Mathematical and Statistical Sciences, University of Alberta.

First Round Book Prizes

Individual Prizes:

The major individual prizes go to the top three students. In particular, the student in First Place is accorded the title of the **A K Peters Scholar**. Below the top three, the following prizes are awarded:

1. First Place among Grade 10 and among Grade 11 students;
2. First and Second Places among students in the Zone.

Team Prizes:

The major team prizes go to the top three teams. In particular, the team in First Place is awarded the **Peter H. Denham Memorial Plaque**. Below the top three teams, the following team prizes are awarded:

1. First Place among teams in the Zone.
2. **Geoff Butler Memorial Team Prize**, going to the top team which has not won any team prizes before, and not any other team prize in the current year.

For the purpose of getting a wider geographical spread for the prizes, the A.H.S.M.C. Board divides Alberta and the North West Territories into the following four zones:

Zone I. The City of Calgary.

Zone II. Rural Southern Alberta (not north of Red Deer, including Red Deer).

Zone III. The City of Edmonton.

Zone IV: Rural Northern Alberta (north of Red Deer) and the N.W.T..

The **Pacific Institute for the Mathematical Sciences** from time to time awards **Robert Barrington Leigh Memorial Prizes** to students in Grade 9 or below whose performances in the First Round are below the top three but at least equal to either the top Grade 10 or the top Grade 11 student not in the top three. These are named after Robert Barrington Leigh, a stellar performer in the A.H.S.M.C. and beyond, who tragically died at the age of 20 in 2006.

Second Round Fellowships

First Place: **ConocoPhillips Canada Fellowship** (\$1500)

Second Place: **Peter H. Denham Memorial Fellowship** (\$750)

Third Place: **Canadian Mathematical Society Fellowship** (\$500)

First Place among Grade 11 students not in the top three:

Alberta Teachers' Association Grade XI Fellowship (\$150)

First Place among Grade 10 students not in the top three:

Alberta Teachers' Association Grade X Fellowship (\$150)

The **Pacific Institute for the Mathematical Sciences** from time to time awards **Robert Barrington Leigh Memorial Fellowships** (\$50 each) to students in Grade 9 or below whose performances in the Second Round are below the top three but at least equal to either the top Grade 10 or the top Grade 11 student not in the top three.