Canadian Mathematics Competition

An activity of The Centre for Education
in Mathematics and Computing,
University of Waterloo, Waterloo, Ontario

Concours canadien de mathématiques

Une activité du Centre d'éducation
en mathématiques et en informatique,
Université de Waterloo, Waterloo, Ontario

2004 Results

Euclid Contest

(Grade 12)

2004 Résultats

Concours Euclid

(12e année - Sec. V)

for the

**The CENTRE for EDUCATION in
MATHEMATICS and COMPUTING**

Awards

pour les prix

**Le CENTRE d'ÉDUCATION en
MATHÉMATIQUES et en INFORMATIQUE**

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The Competition Organization   Organisation du Concours

Executive Committee / Comité exécutif	Barry Ferguson (Director / Directeur), Peter Crippin, Judith Koeller, Ian VanderBurgh
Euclid Committee / Comité Euclide	Ross Willard, (Chair / président), University of Waterloo Bill Bisset, (retired / retraité), Toronto George Bluman, University of British Columbia Adam Brown, Havergal College, Toronto Steve Brown, University of Waterloo Richard Hoshino, Dalhousie University, Halifax Garry Kiziak, Burlington Central H.S., Burlington Darren Luoma, Bear Creek S.S., Barrie John Savage, (retired / retraité), Scheguiandah
Chief Markers / Correcteurs en chef	Steve Brown, University of Waterloo Ross Willard, University of Waterloo
Marking Chairs / Présidents des comités de correction **Waterloo Centre / à Waterloo**	Enzo Carli, University of Waterloo Tom Griffiths, (retired / retraité), London Anita Santin, (retired / retraité), Waterloo John Savage, (retired / retraité), Scheguiandah Walker Schofield, (retired / retraité), London
Montréal Centre / à Montréal	Mike McNally, Lower Canada College, Montréal
Winnipeg Centre / à Winnipeg	John Barsby, St. John's-Ravenscourt School, Winnipeg Mark Bredin, St. John's-Ravenscourt School, Winnipeg
Vancouver Centre / à Vancouver	George Bluman, University of British Columbia
Newfoundland Centre / à Terre-Neuve	Don Rideout, Memorial University
New Brunswick Centre / à Nouveau-Brunswick	Maureen Tingley, University of New Brunswick
Computer Operation / Ordinatique	Steve Breen, University of Waterloo Matthew Oliver, University of Waterloo
Publications / Publications	Linda Schmidt, University of Waterloo
Preparation of Materials / Documentation	Linda Schmidt, University of Waterloo
French Edition / Version française	André Ladouceur, Réseau de l'est, Vanier Gérard Proulx, Collège Catholique Franco-Ouest, Ottawa
Technical Assistants / Adjoints à la technique	Joanne Kursikowski, Kim Schnarr, Kyra Keenan, Lindsay Stewarts, Judy Fox
Validation Committee / Comité de validation	John Barsby, St. John's-Ravenscourt School, Winnipeg Jean Collins, (retired / retraité), Thornhill Tom Griffiths, (retired / retraité), London Frank Rachich (retired / retraité), Ingersoll

The CENTRE for EDUCATION in MATHEMATICS and COMPUTING

Le CENTRE d'ÉDUCATION en MATHÉMATIQUES et en INFORMATIQUE

Peter Crippin

The Centre for Education in Mathematics and Computing is pleased to have sponsored the Euclid Competition in 2004. We are proud to be part of an activity that has provided mathematical enrichment and problem solving for students in schools since 1963.

We are extremely pleased with the results of this year's Euclid contest. We have tried to put together a contest that is both encouraging and at the same time is discriminating. Over the past few years, the averages on the Euclid have improved considerably but we have still been able to produce questions at the upper level that allows for differentiation between the very best students. This year our contest committee, made up of secondary school and university people put together an excellent contest. The questions were interesting and thoughtful and could be approached in a variety of ways. I would like to extend my compliments to the committee.

I also hope that both teachers and students enjoyed working the problems on the paper. Mathematics contests are about preparation and hard work. I hope that teachers enjoy working on problems with students right from the beginning of school in the fall. Problem solving is fun and is rewarding to those who make a strong effort. Even if students do not start off knowing how to solve problems they eventually begin to learn how to solve them and feel the excitement of making their own 'mathematical discovery.'

Let me close by thanking all the teachers and parents who have helped students become more proficient at mathematics. The helping of students brings great joy and is one of the most valuable of all human activities. Once again, let me thank those who have made an effort to help our young people. Your efforts are not unnoticed.

Peter Crippin
Director
Centre for Education in Mathematics and Computing

Peter Crippin
Directeur
Le Centre d'Education en Mathématiques et en Informatique

Canadian Mathematics Competition
Concours canadien de mathématiques

Barry A. Ferguson

Congratulations to every student who prepared for and wrote the Euclid Contest in 2004. With the passing of the double cohort of Ontario students the number of entrants was down to about 15 000 from 2003's 18000, but this represents an increase from previous years. Whether you wrote for fun, pride, by request, or for scholarship consideration, I thank you for your participation on behalf of the Canadian Mathematics Competition and our sponsors.

Performance on the paper was very good. Given the nature of the last few questions the score of 45 comes largely from the first seven questions and thus represents a very commendable performance, as well as being an increase of 3 points from 2003. The last two or three questions were hard, and this will continue to be the case, as we challenge the very best young mathematicians each year. There were only 15 students who scored 90 or higher. These students are the prize winners listed later in these results, and they are to be heartily congratulated on their achievement.

I look forward to seeing many more such results in the future, and would like to thank the students and teachers who participate in the Canadian Mathematics Competition contests for their continuing support.

Commentaires à suivre.

Barry A. Ferguson
Director

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STUDENTS / ÉLÈVES

Students are listed in alphabetical order. / Les élèves sont nommés en ordre alphabetique.

Gold Medals /	Andrew Critch	Clarenville Integrated High School	Clarenville, Newfoundand
Médailles d'or	Andrew Mao	A.B. Lucas Secondary School	London, Ontario
	Chen Shen	A.Y. Jackson Secondary School	North York, Ontario
	Peter Zhan	Sir Winston Churchill High School	Calgary, Alberta
	Yufei Zhao	Don Mills Collegiate Insitute	Don Mills, Ontario

TEAMS / ÉQUIPES

Champion / Première :	University of Toronto Schools	Toronto, Ontario
Second/Deuxième :	Don Mills Collegiate Institute	Don Mills, Ontario
Third / Troisième :	A.B. Lucas Secondary School	London, Ontario
	Vincent Massey Secondary School	Windsor, Ontario
Fifth / Cinquième :	A.Y. Jackson Secondary School	North York, Ontario
Sixth / Sixième :	Lisgar Collegiate Institute	Ottawa, Ontario

The Centre for Education in Mathematics and Computing Prize List /
Liste des prix de la Centre d'Éducation en Mathématiques et en Informatique

Students are listed in alphabetical order. / Les élèves sont nommés en ordre alphabetique.

Cash Prizes ($500 each) / Prix en argent (500 $ chacun)

Andrew Critch	Clarenville Integrated High School	Clarenville, Newfoundand
Andrew Mao	A.B. Lucas Secondary School	London, Ontario
Chen Shen	A.Y. Jackson Secondary School	North York, Ontario
Peter Zhan	Sir Winston Churchill High School	Calgary, Alberta
Yufei Zhao	Don Mills Collegiate Insitute	Don Mills, Ontario

Book Prizes / Prix en livres

Francis Chung	A.B. Lucas Secondary School	London, Ontario
Janos Kramar	University of Toronto Schools	Toronto, Ontario
Silvia Li	Lisgar Collegiate Institute	Ottawa, Ontario
Zhuoran Li	E.L.Crossley Secondary School	Fonthill, Ontario
Michael Lipnowski	St. John's-Ravenscourt School	Winnipeg, Manitoba
Amirali Modir Sanechi	Don Mills Collegiate Insitute	Don Mills, Ontario
Richard Peng	Vaughan Road Academy	Toronto, Ontario
Evan Startford	University of Toronto Schools	Toronto, Ontario
John Sun	Vincent Massey Secondary School	Windsor, Ontario
Jacob Tsimerman	University of Toronto Schools	Toronto, Ontario

The Canadian Mathematics Competition is grateful for the support of the Centre for Education in Mathematics and Computing in providing prizes to the top competitors in the Euclid Mathematics Contest.

Le Concours canadien de mathématiques remercie la Centre d'éducation en mathématiques et en informatique qui fournit les prix aux gagnants du Concours de mathématiques Euclide.

Please note that a student may not be a prize recipient in the Euclid Contest and in the Descartes Contest in the same year. Awards listed are at the discretion of the Executive Committee of the Canadian Mathematics Competition.

Veuillez noter qu'un étudiant ne peut recevoir un prix la même année à la fois dans le Concours Euclide et dans le Concours Descartes. Les prix indiqués le sont à la discrétion du Comité exécutif du Concours canadien de mathématiques.

Distribution of Marks   Distribution des points

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        SCORE              PERCENTAGE OF STUDENTS      CUMULATIVE PERCENTAGE
        NOTE               POURCENTAGE DES ETUDIANTS   POURCENTAGE ACCUMULE

        71-100                    8.5                           8.5
        66-70                     5.0                          13.5
        61-65                     6.6                          20.1
        56-60                     7.8                          27.9
        51-55                     9.1                          37.0
        46-50                    10.1                          47.1
        41-45                    11.1                          58.2
        36-40                    10.4                          68.6
        31-35                     9.9                          78.5
        26-30                     7.9                          86.4
        21-25                     5.9                          92.3
         0-20                     7.7                         100.0

        11608 STUDENTS                         AVERAGE MARK        45.00
        11608 ELEVES                             MOYENNE           45.00

        MARK 1        27.11
        MARK 2        14.64
        MARK 3         3.24
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This chart above pertains to all competitors. / Le graphique précédent s'applique à tous les concurrents.

Averages   Moyenne

1. 8.4
2. 8.3
3. 5.9
4. 4.5
5. 5.5
6. 4.7
7. 4.5
8. 1.9
9. 1.1
10. 0.2

> Please visit our web site at:
>   www.cemc.uwaterloo.ca
> to download the 2004 Euclid Contest, plus full solutions.
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> _____
>
> Veuillez visiter notre site Web à
>   www.cemc.uwaterloo.ca
> pour télécharger les concours Euclide 2004, avec solutions complètes.

Student Enrolment by Province   Inscription par province

Newfoundland	246	Terre-Neuve	Ontario	8670	Ontario
Nova Scotia	324	Nouvelle-Écosse	Manitoba	412	Manitoba
New Brunswick	273	Nouveau-Brunswick	Saskatchewan	240	Saskatchewan
Prince Edward Island	23	Ile-du-Prince-Édouard	Alberta	399	Alberta
Quebec	245	Québec	British Columbia	3115	Colombie-Britannique

Total number of students enrolled / Nombre d'inscriptions individuelles: 13 947

1. All three parts of this question were done very well. The only problem that students had with this first question was in part (c). If students calculated the hypotenuse of the small triangles and then calculated the area of the internal figure without justifying that EFGH was a square then they earned only 5 marks. If, however, they calculated the area of the four smaller triangles and then subtracted this total from the area of the large square then they earned full marks. In this case no justification was required.

2. This question was very well done. Part (c) could be approached in a variety of different ways including similar triangles or analytic geometry.

3. This question was done well for the most part. If students represented the sequence as $a - 2d,\ a - d,\ a,\ a + d,\ a + 2d$ the calculations were easier. In part (b) the use of the identity, $(x + y)^2 = (x - y)^2 + 4xy$, makes the calculation straight-forward. It is also possible to solve this as a system of two equations in two unknowns, which is correct, but it makes for awkward calculations.

4. This question was well done. The only difficulty experienced by some students in part (a) was that the outcome five occurs only 11 times, and not 12. In part (b), we recognize this as an identity and so a equals 3 or -3 and the calculation for b comes from the equation $b^2 - b = 0$. Note, however, that this result must be verified in the third equation thus resulting in just two ordered pairs.

5. Part (a) was done well by the majority of students. The problem for some students in this part was in the factoring of 2^{x+4} from the right side. In part (b), it is necessary to recognize that the point P has coordinates (-1,0) and then substituting $x = -1$, $y = 0$ gives the value for t.

6. Part (a) was done extremely well. Most students recognized immediately that it was necessary to include a loonie and four pennies which then made the question very straightforward. A lot of students got part (b) correct. In part (b), the calculation was made much easier by removing common factors. It was possible to multiply everything out but this made the algebra unnecessarily difficult.

7. There was no difficulty with part (a). Students did very well on this part. It was very nice to see the variety of solutions to part (b). Students seemed to have a very good idea of how to proceed and as a result did a good job.

8. Part (a) was handled nicely by a large number of students. It was intended that (a) be used as a lead in to part (b). We hoped that if students recognized in part (a) that it was necessary to cube the expression for T that this would be something that they would do in part (b). This was recognized by a large number of students. In this question we asked for an 'exact value' and most students realized that this meant that calculator values were not acceptable if students wished to earn full marks.

9. This question was reasonably well for so late in the paper. Parts (a) and (b) were numerical in nature and involved nothing more than the cosine law and some elementary number theory. Part (c) was quite difficult but had a number of different approaches.

10. This is an interesting question and is actually easier than number 9. In part (a) and (b) you are actually asked to just calculate and fiddle with the concept. In part (c), this is just a parity argument. This question is worth trying again when there is more time. (A Skolem sequence does actually exist and is something that can be looked up on the Web and investigated.)

	SCHOOL ECOLE	LOCATION ENDROIT	PROV PROV	SCORE NOTE
1	UNIV. OF TORONTO SCHOOLS	TORONTO	ON	277
2	DON MILLS C.I.	DON MILLS	ON	274
3	A.B. LUCAS S.S.	LONDON	ON	268
	VINCENT MASSEY S.S.	WINDSOR	ON	268
5	A.Y. JACKSON S.S.	NORTH YORK	ON	266
6	LISGAR C.I.	OTTAWA	ON	262
7	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	260
8	SIR WINSTON CHURCHILL H.S.	CALGARY	AB	258
9	WESTERN CANADA H.S.	CALGARY	AB	256
10	PORT MOODY S.S.S.	PORT MOODY	BC	254
11	BURNABY SOUTH S.S.	BURNABY	BC	252
12	MONARCH PARK C.I.	TORONTO	ON	251
	UPPER CANADA COLLEGE	TORONTO	ON	251
14	JARVIS C.I.	TORONTO	ON	250
15	YORK MILLS C.I.	NORTH YORK	ON	249
	THORNHILL S.S.	THORNHILL	ON	249
17	EARL HAIG S.S.	NORTH YORK	ON	248
	SEAQUAM S.S.	NORTH DELTA	BC	248
19	DAVID THOMPSON S.S.	VANCOUVER	BC	247
20	WESTDALE S.S.	HAMILTON	ON	246
	BAYVIEW SECONDARY SCHOOL	RICHMOND HILL	ON	246
	POINT GREY S.S.	VANCOUVER	BC	246
23	SIR JOHN A. MACDONALD C.I.	AGINCOURT	ON	245
	GEORGE S. HENRY ACADEMY	TORONTO	ON	245
	COLUMBIA INTERNATIONAL COLLEGE	HAMILTON	ON	245
	BURNABY NORTH S.S.	BURNABY	BC	245
27	ALBERT CAMPBELL C.I.	SCARBOROUGH	ON	243
	WATERLOO C.I.	WATERLOO	ON	243
29	SIR WINSTON CHURCHILL S.S.	VANCOUVER	BC	241
30	MARTINGROVE C.I.	ETOBICOKE	ON	240
	ST. GEORGE'S SCHOOL	VANCOUVER	BC	240
32	HOLY HEART OF MARY REG. H.S.	ST. JOHN'S	NL	239
33	VICTORIA PARK S.S.	NORTH YORK	ON	238
	GLENFOREST S.S.	MISSISSAUGA	ON	238
	LONDON CENTRAL S.S.	LONDON	ON	238
36	MARIANOPOLIS COLLEGE	MON REAL	QC	237
	MARKVILLE S.S.	MARKHAM	ON	237
38	FOREST HILL C.I.	TORONTO	ON	236
	J.N. BURNETT S.S.	RICHMOND	BC	236
40	WOBURN COLLEGIATE INSTITUTE	TORONTO	ON	235
	L'AMOREAUX C.I.	AGINCOURT	ON	235
	VAUGHAN S.S.	THORNHILL	ON	235
	HANDSWORTH S.S.	NORTH VANCOUVER	BC	235
	SENTINEL S.S.	WEST VANCOUVER	BC	235
45	GLEBE COLLEGIATE INSTITUTE	OTTAWA	ON	234
	WILLIAM LYON MACKENZIE C.I.	TORONTO	ON	234
	THE COUNTRY DAY SCHOOL	KING CITY	ON	234
48	OAKWOOD C.I.	TORONTO	ON	233
	SEMIAHMOO S.S.	SURREY	BC	233
50	UNIONVILLE H.S.	UNIONVILLE	ON	232
	OLD SCONA ACADEMIC H.S.	EDMON ON	AB	232
	TEMPLETON S.S.	VANCOUVER	BC	232

There were 1159 schools enrolled. There were 880 three-student teams.
1159 écoles étaient inscribes. Il y avait 880 équipes de trois élèves.

Students are listed in alphabetical order within each group. / Dans chaque groupe, les élèves sont nommés en ordre alphabetique.

NAME NOM		SCHOOL ECOLE	LOCATION ENDROIT	PROV PROV	GR NIVEAU	AGE AGE

GROUP I / GROUPE I

CRITCH	ANDREW J	CLARENVILLE INTEGRATED H.S.	CLARENVILLE	NL	12	17
MAO	ANDREW	A.B. LUCAS S.S.	LONDON	ON	12	17
SHEN	CHEN	A.Y. JACKSON S.S.	NORTH YORK	ON	12	18
ZHANG	PETER	SIR WINSTON CHURCHILL H.S.	CALGARY	AB	12	18
ZHAO	YUFEI	DON MILLS C.I.	DON MILLS	ON	10	15

GROUP II / GROUPE II   SCORES / NOTES   94 – 90

CHUNG	FRANCIS	A.B. LUCAS S.S.	LONDON	ON	11	17
KRAMAR	JANOS	UNIV. OF TORONTO SCHOOLS	TORONTO	ON	11	17
LI	C SILVIA	LISGAR C.I.	OTTAWA	ON	12	18
LI	ZHUORAN	E.L. CROSSLEY S.S.	FONTHILL	ON	12	16
LIPNOWSKI	MICHAEL	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	12	18
MODIR SHANECHI	AMIRALI	DON MILLS C.I.	DON MILLS	ON	12	17
PENG	RICHARD	VAUGHAN ROAD ACADEMY	TORONTO	ON	10	15
STRATFORD	EVAN	UNIV. OF TORONTO SCHOOLS	TORONTO	ON	12	17
SUN	JOHN	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
TSIMERMAN	JACOB	UNIV. OF TORONTO SCHOOLS	TORONTO	ON	10	15

GROUP III / GROUPE III   SCORES / NOTES   88 – 86

CHEN	TONY	SEAQUAM S.S.	NORTH DELTA	BC	11	16
CHOY	STEPHEN	UPPER CANADA COLLEGE	TORONTO	ON	12	18
CHUANG	DENNIS	STRATHCONA-TWEEDSMUIR SCHOOL	OKOTOKS	AB	12	18
DAN	RONGTAO	POINT GREY S.S.	VANCOUVER	BC	11	16
FOLZ	MATTHEW	PORT MOODY S.S.S.	PORT MOODY	BC	12	17
HAN	POLLY	WESTERN CANADA H.S.	CALGARY	AB	11	17
JIN	HYUNJONG	PORT MOODY S.S.S.	PORT MOODY	BC	12	18
LIU	HENRY	BURNABY NORTH S.S.	BURNABY	BC	10	16
LIU	PEIPEI	GEORGE S. HENRY ACADEMY	TORONTO	ON	12	19
LIU	TAOTAO	VINCENT MASSEY S.S.	WINDSOR	ON	11	15
OH	SUKWON	MARTINGROVE C.I.	ETOBICOKE	ON	12	17
PAN	CHUNPO	JARVIS C.I.	TORONTO	ON	12	18
SO	ADRIAN	DON MILLS C.I.	DON MILLS	ON	12	18
SO	WAI YIP	L'AMOREAUX C.I.	AGINCOURT	ON	12	17
WEI	YEHUA	YORK MILLS C.I.	NORTH YORK	ON	12	18
WEI	ZEYING	WESTDALE S.S.	HAMILTON	ON	12	18
WU	STEVEN	A.Y. JACKSON S.S.	NORTH YORK	ON	11	16
YING	LI	LISGAR C.I.	OTTAWA	ON	12	17
ZHANG	ALLEN	BURNABY SOUTH S.S.	BURNABY	BC	10	16
ZHANG	GUAN	GRANT PARK H.S.	WINNIPEG	MB	12	19
ZHAO	YIN	VINCENT MASSEY S.S.	WINDSOR	ON	12	17

GROUP IV / GROUPE IV   SCORES / NOTES   85 – 84

CAI	ALLAN	BAYVIEW SECONDARY SCHOOL	RICHMOND HILL	ON	12	18
CHEN	LUYI	MONARCH PARK C.I.	TORONTO	ON	12	18
DENG	BO HONG	JARVIS C.I.	TORONTO	ON	10	16
EMBREE	ROBERT	DR. JOHN HUGH GILLIS SCHOOL	ANTIGONISH	NS	12	16
FAN	FREEMAN	OLD SCONA ACADEMIC H.S.	EDMONTON	AB	12	17
FEI	LIN	SIR WINSTON CHURCHILL S.S.	VANCOUVER	BC	12	18
GUEST	WILL	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	12	16
HO	MARTIN	J.N. BURNETT S.S.	RICHMOND	BC	10	16
JIANG	CHARLEY	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
KOLEV	RUSI	BURNABY SOUTH S.S.	BURNABY	BC	11	17
KWAK	DANIEL	LOWER CANADA COLLEGE	MONTREAL	QC	11	16

LEE	SUE JEAN	BISHOP STRACHAN SCHOOL	TORONTO	ON	12	18
LEUNG	DERRICK	UPPER CANADA COLLEGE	TORONTO	ON	12	17
LI	YICHUN	VICTORIA PARK S.S.	NORTH YORK	ON	12	17
LIN	ELEANOR	DAVID THOMPSON S.S.	VANCOUVER	BC	12	17
LIU	JINGQI	MONARCH PARK C.I.	TORONTO	ON	12	19
MA	RUI	VINCENT MASSEY S.S.	WINDSOR	ON	12	18
PARK	JUNHYUN	BODWELL H.S.	NORTH VANCOUVER	BC	12	18
PARK	MICHAEL	THORNHILL S.S.	THORNHILL	ON	11	16
SINGH	VISHVAJIT	MARKVILLE S.S.	MARKHAM	ON	12	18
SO	KELVIN	GLENFOREST S.S.	MISSISSAUGA	ON	12	18
SUN	SARAH	HOLY TRINITY ACADEMY	OKOTOKS	AB	10	16
SUN	YI	EARL HAIG S.S.	NORTH YORK	ON	12	17
WANG	LIE	COLUMBIA INTERNATIONAL COLLEG	HAMILTON	ON	12	18
WANG	LINDA	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
WANG	QIAN	SEMIAHMOO S.S.	SURREY	BC	12	18
WHITE	SHAUN	VINCENT MASSEY S.S.	WINDSOR	ON	11	16
WOLSKE	ZACK	ANDERSON C.&V.I.	WHITBY	ON	12	17
WU	NATHANAEL	WESTERN CANADA H.S.	CALGARY	AB	12	17
XU	QIANYING	LISGAR C.I.	OTTAWA	ON	12	18
YIN	TI	WILLIAM LYON MACKENZIE C.I.	TORONTO	ON	12	17
YUE	TOM	A.Y. JACKSON S.S.	NORTH YORK	ON	12	17
ZHANG	BAOSEN	WATERLOO C.I.	WATERLOO	ON	12	18
ZHANG	KEN	WESTERN CANADA H.S.	CALGARY	AB	11	17
ZHOU	ZHI BIN	EARL HAIG S.S.	NORTH YORK	ON	12	18

GROUP V / GROUPE V   SCORES / NOTES 83 – 82

ABDEH KOLACHI	MEHDI	HALIFAX WEST H.S.	HALIFAX	NS	12	17
ADLER	GEORGE	GLOUCESTER H.S.	GLOUCESTER	ON	12	16
BAO	JIE	VICTORIA PARK S.S.	NORTH YORK	ON	12	17
CHANG	HARRY	H.B. BEAL S.S.	LONDON	ON	12	14
CHEUNG	TIMOTHY	DON MILLS C.I.	DON MILLS	ON	12	17
CHOO	YONJOON	PINE RIDGE S.S.	PICKERING	ON	10	16
CHOW	ANSELINA	BROTHER ANDRE C.H.S. .	MARKHAM	ON	12	17
DU	BARTON	SEAQUAM S.S.	NORTH DELTA	BC	12	19
FAN	JUN	CARLTON COMP.H.S.	PRINCE ALBERT	SK	12	17
FAN	VICTOR	DOVER BAY S.S.	NANAIMO	BC	11	16
GORNER	JOSHUA	HOLY HEART OF MARY REG. H.S.	ST. JOHN'S	NL	12	17
GUO	ZHENG	WESTERN CANADA H.S.	CALGARY	AB	10	16
HALL	STEVEN	SUTTON D.H.S.	SUTTON	ON	12	17
HAN	LUKE	A.B. LUCAS S.S.	LONDON	ON	12	18
HAO	WEIBO	VINCENT MASSEY S.S.	WINDSOR	ON	12	18
HO	JEFFREY	ST. GEORGE'S SCHOOL	VANCOUVER	BC	12	17
HONG	TIANLI	YORK MILLS C.I.	NORTH YORK	ON	12	18
HOU	JING YUAN	GEORGE S. HENRY ACADEMY	TORONTO	ON	12	19
HU	YOUWEN	MONARCH PARK C.I.	TORONTO	ON	11	17
HWANG	ANDY	THORNHILL S.S.	THORNHILL	ON	12	18
JU	DANIEL	GLEBE COLLEGIATE INSTITUTE	OTTAWA	ON	12	17
KIM	JAEHUN	BAYVIEW SECONDARY SCHOOL	RICHMOND HILL	ON	12	19
LEE	BRYANT	BURNABY MOUNTAIN S.S.	BURNABY	BC	11	17
LEE	JASON	TERRY FOX S.S.S.	PORT COQUITLAM	BC	11	16
LEE	WOO	HANDSWORTH S.S.	NORTH VANCOUVER	BC	12	18
LI	WILLIAM	GORDON GRAYDON MEMORIAL S.S.	MISSISSAUGA	ON	12	17
LI	YUKAI	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
LIN	NANQIAN	ALBERT CAMPBELL C.I.	SCARBOROUGH	ON	12	18
LIU	ANDY	SIR WINSTON CHURCHILL H.S.	CALGARY	AB	11	17
MARINOV	RADOSLAV	HARRY AINLAY H.S.	EDMONTON	AB	12	18
MOK	YUEN TAK	CHAMPLAIN REGIONAL COLLEGE	ST. LAMBERT	QC	12	18
NG	KIM	HAVERGAL COLLEGE	TORONTO	ON	12	17
NYBORG	TIMOTHY	EVAN HARDY C.I.	SASKATOON	SK	12	17
PAREJA	DANIEL	TEMPLETON S.S.	VANCOUVER	BC	12	17
PARENT	SIMON	KITCHENER-WATERLOO C.I. & V.I	KITCHENER	ON	11	16
PARK	JENNIFER	BLUEVALE C.I.	WATERLOO	ON	10	16

SIU	GEOFFREY	LONDON CENTRAL S.S.	LONDON	ON	11	15
SONG	YIQIAN	WEST TORONTO C.I.	TORONTO	ON	12	18
SRITHARAN	THUWARAGAN	WOBURN COLLEGIATE INSTITUTE	TORONTO	ON	12	17
SUN	CHRIS	ALBERT CAMPBELL C.I.	SCARBOROUGH	ON	12	19
TANG	JEFFREY	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	12	17
THOMPSON	EVAN	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	12	17
WONG	IAN	VANCOUVER COLLEGE H.S.	VANCOUVER	BC	12	17
WOO	VINCENT	ERIC HAMBER S.S.	VANCOUVER	BC	11	17
WRIGLEY	MALKA	OLD SCONA ACADEMIC H.S.	EDMONTON	AB	11	16
XIAO	RICKY	SIR JOHN A. MACDONALD S.S.	HAMILTON	ON	12	17
XING	SIYUAN	VINCENT MASSEY S.S.	WINDSOR	ON	10	16
YE	JIMMY PENG	SIR JOHN A. MACDONALD C.I.	AGINCOURT	ON	11	17
YE	JINCHENG	SIR JOHN A. MACDONALD C.I.	AGINCOURT	ON	12	17
YOO	JUNBAE	ST. MICHAEL'S UNIV. SCHOOL	VICTORIA	BC	11	17
ZHANG	SI	ADEN BOWMAN C.I.	SASKATOON	SK	12	17
ZHOU	RYAN	ADAM SCOTT C.&V.I.	PETERBOROUGH	ON	10	16
ZHOU	SHAWN	DAVID THOMPSON S.S.	VANCOUVER	BC	12	17

GROUP VI / GROUPE VI   SCORES / NOTES   81 – 80

AN	YOONSUK	BREBEUF COLLEGE SCHOOL	WILLOWDALE	ON	12	18
BLAKE	CHRIS	MCKINNON PARK S.S.	CALEDONIA	ON	12	17
CAI	XUEHAN	FOREST HILL C.I.	TORONTO	ON	12	18
CHAMBERS	GREGORY	WESTERN TECH. COMM. SCHOOL	TORONTO	ON	11	17
CHANG	LARRY	SEAQUAM S.S.	NORTH DELTA	BC	11	16
CHANG	TREVOR	PACIFIC ACADEMY	SURREY	BC	12	18
CHEN	MO	WINDERMERE S.S.	VANCOUVER	BC	10	16
CHEUNG	JASON	GORDON GRAYDON MEMORIAL S.S.	MISSISSAUGA	ON	12	18
CHO	EUNMEE	PORT CREDIT S.S.	MISSISSAUGA	ON	12	18
CHOI	OLIVIA	VAUGHAN S.S.	THORNHILL	ON	12	18
CHONG	KENNETH	WEXFORD C.I.	SCARBOROUGH	ON	12	17
DARWIN	BENJAMIN	ST. THOMAS AQUINAS	TOTTENHAM	ON	12	17
DICKSON	NEIL	MACKENZIE H.S.	DEEP RIVER	ON	12	17
FENG	NAN	SENTINEL S.S.	WEST VANCOUVER	BC	12	19
FU	MICHAEL	UPPER CANADA COLLEGE	TORONTO	ON	11	17
FULMYK	MICHAL	ST. JOAN OF ARC C.H.S.	MAPLE	ON	12	17
GE	YIN	MARIANOPOLIS COLLEGE	MONTREAL	QC	12	17
GRANT	ELYOT	CAMERON HEIGHTS C.I.	KITCHENER	ON	11	16
GRANT	JONATHON	SIR W. LAURIER S.S.	LONDON	ON	12	17
GUO	STEVEN	MAGEE SECONDARY SCHOOL	VANCOUVER	BC	12	19
HAN	SIZHE	COLUMBIA INTERNATIONAL COLLEG	HAMILTON	ON	12	19
HAO	JING	OAKWOOD C.I.	TORONTO	ON	12	19
HUANG	ANDY	SIR ROBERT BORDEN H.S.	NEPEAN	ON	12	17
JIN	SHA	YORK MILLS C.I.	NORTH YORK	ON	11	17
KIM	ALBERT	DR. G.W. WILLIAMS S.S.	AURORA	ON	12	18
KIM	STEVE	PORT MOODY S.S.S.	PORT MOODY	BC	11	16
KONG	ANDY	VINCENT MASSEY S.S.	WINDSOR	ON	12	15
KRAUSE	BEN	ST. GEORGE'S SCHOOL	VANCOUVER	BC	10	15
KWA	JIMMY	H.J. CAMBIE S.S.	RICHMOND	BC	12	17
LAM	KEVIN	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	11	16
LI	LI	PORT DOVER COMP. SCHOOL	PORT DOVER	ON	12	19
LI	MICHAEL	UNIVERSITY HILL S.S.	VANCOUVER	BC	11	16
LI	QING	ST. JOHN'S KILMARNOCK SCHOOL	BRESLAU	ON	11	19
LIE	YOOHAN	ASHBURY COLLEGE	OTTAWA	ON	12	19
LIN	YE	WESTERN CANADA H.S.	CALGARY	AB	12	18
LIU	YINGYING	SENTINEL S.S.	WEST VANCOUVER	BC	12	18
LUDWIN	ILANA	WESTDALE S.S.	HAMILTON	ON	12	18
NAGY	LISA	OAKRIDGE S.S.	LONDON	ON	12	17
NGAI	DARRYL	VAUGHAN S.S.	THORNHILL	ON	12	17
OH	ERIN	GLENEAGLE S.S.	COQUITLAM	BC	11	16
PARRY	W OWEN	MERIVALE H.S.	OTTAWA	ON	12	17
PRZYBYTKOWSKI	KAROL	MARIANOPOLIS COLLEGE	MONTREAL	QC	12	18
QIN	ANGELA	VINCENT MASSEY S.S.	WINDSOR	ON	12	17

RAMMO	WAEL	VINCENT MASSEY S.S.	WINDSOR	ON	11	17
RUAN	ZHENDONG	DR. NORMAN BETHUNE C.I.	SCARBOROUGH	ON	12	19
SENEVIRATNE	RAJIV	OAKWOOD C.I.	TORONTO	ON	12	17
SHAPIRO	ROMAN	VINCENT MASSEY S.S.	WINDSOR	ON	11	17
SHARAFAT	ALI REZA	LISGAR C.I.	OTTAWA	ON	12	18
SHI	PENG	SIR JOHN A. MACDONALD C.I.	AGINCOURT	ON	10	15
SIN	JISEOB	PINETREE S.S.	COQUITLAM	BC	11	17
SKOUFRANIS	PAUL	THORNHILL S.S.	THORNHILL	ON	12	17
SONG	ZIJUNSHIRL	DAVID THOMPSON S.S.	VANCOUVER	BC	12	18
SUEN	ALEXANDER	ST. JOHN'S-RAVENSCOURT SCHOOL	WINNIPEG	MB	12	17
TAO	MICHAEL	WATERLOO C.I.	WATERLOO	ON	12	17
WAN	FENG	COLUMBIA INTERNATIONAL COLLEG	HAMILTON	ON	12	18
WANG	FRANK	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
WANG	JENNY	DON MILLS C.I.	DON MILLS	ON	11	17
XIA	YAN	BURNABY CENTRAL S.S.	BURNABY	BC	12	18
XIA	YANG	VINCENT MASSEY S.S.	WINDSOR	ON	12	17
XIE	JOYCE	BURNABY SOUTH S.S.	BURNABY	BC	12	18
YEUNG	DARWIN	UPPER CANADA COLLEGE	TORONTO	ON	12	18
YEUNG	NICHOLAS	MARKHAM D.H.S.	MARKHAM	ON	12	17
YU	BO YANG	SAINT JOHN H.S.	SAINT JOHN	NB	12	17
ZHANG	HANFEI	A.Y. JACKSON S.S.	NORTH YORK	ON	12	18
ZHANG	HARVEY	BURNABY NORTH S.S.	BURNABY	BC	12	17
ZHANG	RUIKAN	POINT GREY S.S.	VANCOUVER	BC	11	16
ZHAO	SAMUEL	ENVER CREEK SECONDARY SCHOOL	SURREY	BC	10	15
ZHENG	YUEYIN	FOREST HILL C.I.	TORONTO	ON	12	18

RANK/ POSITION	SCORE/ NOTE	RANK/ POSITION	SCORE/ NOTE	RANK/ POSITION	SCORE/ NOTE
1	97	2827	54	10209	13
2	95	3010	53	10261	12
6	94	3208	52	10311	11
7	93	3400	51	10336	10
10	92	3597	50	10364	9
14	91	3822	49	10387	8
15	90	4021	48	10405	7
18	88	4247	47	10427	6
23	87	4454	46	10441	5
31	86	4673	45	10451	4
41	85	4925	44	10463	3
62	84	5161	43	10469	2
81	83	5383	42	10476	1
107	82	5626	41	10478	0
136	81	5856	40		
166	80	6091	39		
205	79	6316	38		
266	78	6554	37		
318	77	6772	36		
381	76	6993	35		
424	75	7205	34		
477	74	7414	33		
550	73	7651	32		
626	72	7854	31		
698	71	8088	30		
760	70	8271	29		
840	69	8444	28		
927	68	8617	27		
1027	67	8794	26		
1133	66	8960	25		
1229	65	9116	24		
1339	64	9254	23		
1459	63	9397	22		
1584	62	9498	21		
1726	61	9630	20		
1863	60	9742	19		
2014	59	9855	18		
2163	58	9943	17		
2327	57	10017	16		
2489	56	10096	15		
2654	55	10157	14		

The listing above pertains to official candidates only. / La liste précédente ne s'applique qu'aux candidats officiels.