



The CENTRE for EDUCATION
in MATHEMATICS and COMPUTING

Le CENTRE d'ÉDUCATION
en MATHÉMATIQUES et en INFORMATIQUE

www.cemc.uwaterloo.ca

2012
Results

2012
Résultats

Euclid Contest

Concours Euclide

UNIVERSITY OF
WATERLOO

WATERLOO
MATHEMATICS

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Darren Luoma, Bear Creek S.S., Barrie, ON
Alex Pintilie, Crescent School, Toronto, ON
Larry Rice, Toronto, ON
Ross Willard, University of Waterloo, Waterloo, ON

Overall Comments

Congratulations to all of the participants in the 2012 Euclid Contest. The average score of 45.5 is lower than that of 2011. We were very pleased that a large number of students achieved some success on the early parts of the last few problems on the paper. At the same time, the later parts of these problems managed to challenge the top students even more than last year's problems. Special congratulations go to the 12 official contestants who achieved scores of 95 and higher this year.

We at the Centre for Education in Mathematics and Computing believe strongly that it is very important for students to both learn to solve mathematics problems and learn to write good solutions to these problems. Many students do a reasonable job of writing solutions, while others still include no explanation whatsoever.

Special thanks go to the Euclid Problems Committee that annually sets the Contest problems and manages to achieve a very difficult balancing act of providing both accessible and challenging problems on the same paper.

To the students who wrote, the parents who supported them, and the teachers who helped them along the way, thank you for your continuing participation and support. We hope that you enjoyed the Contest and relished the challenges that it provided. We hope that mathematics contests continue to feed your love for and interest in mathematics.

Specific Comments

1. Average: 9.1

This question was well done. Some students could have provided a more clear, step-by-step explanation in part (c).

2. Average: 8.5

Parts (a) and (b) were well done, with few common errors in either part. Part (c) was solved correctly by nearly everyone, although many students did not write a concluding statement with the ordered pairs.

3. Average: 6.4

Part (a) of this question was understood and done correctly by most students. One common mistake was not realizing that water was being added to the initial solution. In part (b), many students obtained the correct answer, but did not provide sufficient analysis to earn full marks. Nice solutions included graphs or linear functions or an absolute function.

4. Average: 6.1

Part (a) was handled well by most students. Many students were able to provide useful graphs to help them with the question. Part (b) was also well done. Common answers included $(1, 2)$, $(1, 3)$, $(18, 1)$, and $(1, 22)$, and then others where possible values of $a + b = 80, 125$, and so on.

5. Average: 6.3

Part (a) was done well. The cosine law was used often to calculate the angle rather than notice the $1 : 1 : \sqrt{2}$ ratio of side lengths. The answer to part (b) was often correct, but the solution was not always presented clearly. In particular, there was little justification that $SX = 4$. There were other constructions that were used in a helpful way, such as extending sides PS and QR to form an equilateral triangle or extending side PQ to form a parallelogram.

6. Average: 4.0

In part (a), students received part marks for mentioning that there were 64 possible outcomes, or that the probability that one player wins more than the other was $\frac{11}{16}$. In part (b), it was quite common to see students incorrectly apply a logarithm to each term of the sum. From here, there were some part marks

given for using some correct properties of logarithms such as bringing the exponent of the argument out in front or writing the sum of logarithms as the logarithm of a product. Most students concluded from $\frac{3^x}{2^x} = \frac{27}{8}$ that $x = 3$ by equating the numerators and equating the denominators. To obtain full marks, students needed to write the left side as a single exponential $\left(\frac{3}{2}\right)^x = \frac{27}{8}$ to correctly conclude that $x = 3$ is the only solution.

7. Average: 2.8

In part (a), some students seemed confused by the condition that $\theta < 60^\circ$. Many were able to calculate $\angle BED$ but algebraic errors were common in keeping track of the angles along the way. Part (b) had a variety of interesting and well-written solutions. One nice solution, that did not involve trigonometry, used the Pythagorean theorem in $\triangle TGQ$ by noticing that hypotenuse $TQ = 2PR = 2\sqrt{45}$ by congruent triangles. This gave the equation $(\sqrt{81 - OG^2})^2 + (9 + OG)^2 = (2\sqrt{45})^2$. Yet another solution used the fact that the height from the ground y can be graphed as a cosine function of t . One such representation was $y = 10 + 9\cos(k(t - 4))$, into which students could substitute the known coordinates of the point P to find k and then solve for the coordinates of Q at $t = 12$. A very common error in (b) was to state that since Kolapo travels up 3m in 4 sec, that he must travel $2(3) = 6$ m down in $2(4) = 8$ seconds. This incorrect simplification of the problem led to an answer of $19 - 6 = 13$ m.

8. Average: 1.7

In part (a), many students estimated the time by looking at the picture, and guessed $\frac{11}{12}$. Some interesting solutions involved viewing the circumference of the clock to be size 60, and compute using distances around the clock. In part (b), quite a few students did not use another variable as in the posted solution, and just solved the equation as is.

9. Average: 0.1

In part (a), many students used the 567 “too early” in the computation, trying to argue that some minimal arrangement could be “easily extended”; this argument usually did not work. Students who got close to the ending point often forgot to examine the smallest cases. Many different solutions to part (b) were presented. A number of students dropped perpendiculars and used similar triangles. Other students extended the two lines AB and CD (assuming they are non-parallel) to meet at a new point O , and then use sines and similar triangles.

10. Average: 0.5

While many students obtained the correct answer to part (a), students often forgot the Eden sequence “1, 4” and ended up counting only 11 sequences. In part (b), a few students noticed a correct recurrence relation but were unable to prove it, and others managed to both notice and prove a correct relation.

Please visit our website at www.cemc.uwaterloo.ca to download the 2012 Euclid Contest, plus full solutions.

Commentaires Généraux

Félicitations à tous les participants du Concours Euclide 2012. La note moyenne de 45,5 est inférieure à celle de 2011. Nous avons eu le plaisir de constater que beaucoup d'élèves ont eu du succès dans les premières parties des dernières questions. De plus, les dernières parties de ces problèmes présentaient un plus grand défi pour les meilleurs étudiants que l'année dernière. Des félicitations spéciales vont aux douze concurrents officiels qui ont atteint une note supérieure ou égale à 95 sur 100.

Le Centre d'éducation en mathématiques et en informatique croit fortement qu'il est très important pour les étudiant(e)s d'apprendre à résoudre des problèmes de mathématiques ainsi que d'apprendre à écrire de bonnes solutions à ces problèmes. Plusieurs étudiants développent leurs solutions raisonnablement bien, tandis que d'autres n'incluent aucune explication avec leurs réponses.

Un grand merci va au comité des problèmes du concours Euclide qui rassemble annuellement les problèmes du concours et réussit à accomplir la tâche difficile de concevoir des problèmes accessibles et stimulants sur le même examen.

Un grand merci aux étudiant(e)s qui ont écrit, aux parents qui les ont soutenus et aux enseignant(e)s qui les ont aidés pour votre participation continue et votre soutien. Nous espérons que vous avez apprécié le concours et savouré les défis qu'il a présentés. Nous espérons que les concours de mathématiques continuent à nourrir votre amour et intérêt pour les mathématiques.

Remarques particulières

1. Moyenne: 9,1
À suivre.
2. Moyenne: 8,5
À suivre.
3. Moyenne: 6,4
À suivre.
4. Moyenne: 6,1
À suivre.
5. Moyenne: 6,3
À suivre.
6. Moyenne: 4,0
À suivre.
7. Moyenne: 2,8
À suivre.
8. Moyenne: 1,7
À suivre.
9. Moyenne: 0,1
À suivre.
10. Moyenne: 0,5
À suivre.

Veillez visiter notre site Web à www.cemc.uwaterloo.ca pour télécharger le Concours Euclide 2012, avec solutions complètes.

STUDENTS / ÉLÈVES

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

Plaques	Matthew Brennan	Upper Canada College	Toronto, ON
	Dong Won Kang	North Toronto C.I.	Toronto, ON
	Leo Lai	Sir Winston Churchill S.S.	Vancouver, BC
	James Rickards	Colonel By S.S.	Gloucester, ON
	Daniel Spivak	Bayview S.S.	Richmond Hill, ON

Each plaque winner receives a \$500 cash prize from the Centre for Education in Mathematics and Computing. /

Chaque élève qui reçoit une plaque recevra aussi un prix de 500 \$ du Centre d'éducation en mathématiques et en informatique.

Book Prizes/ Prix en livres	Vitalik Buterin	The Abelard School	Toronto, ON
	Tian Ren Jin	Pearson Int'l College	Toronto, ON
	Yi Liu	York Mills C.I.	North York, ON
	Liwen Lu	Vincent Massey H.S.	Brandon, MB
	Antonio Molina	École Ste. Anne	Fredericton, NB
	Jordan Teitelbaum	Tanenbaum CHAT	Maple, ON
	Fei Wu	Upper Canada College	Toronto, ON
	Yongyi Wu	Lester Pearson College	Victoria, BC
	Darin Yu	L'Amoreaux C.I.	Scarborough, ON
	Kevin Zhou	Woburn C.I.	Scarborough, ON

TEAMS / ÉQUIPES

Champion/Première:	Bayview S.S.	Richmond Hill, ON
Second/Deuxième:	Upper Canada College	Toronto, ON
Third/Troisième:	Lord Byng S.S.	Vancouver, BC
Fourth/Quatrième:	Marc Garneau C.I.	North York, CI
Fifth/Cinquième:	York Mills C.I.	North York, ON

**Number of students registered by province /
Nombre d'étudiants inscrit par province**

	Enrollment/ Inscription
NL	148
NS	227
NB	133
PE	24
QC	300
ON	8865
MB	291
SK	212
AB	486
BC	2332
YT	11
International	3671
Total	<hr/> 16700

There were 1278 schools enrolled. / 1278 écoles étaient inscrites.

Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position
100	1	74	373	49	3541	24	8354
99	3	73	439	48	3752	23	8447
98	5	72	507	47	4000	22	8532
97	6	71	563	46	4226	21	8636
96		70	630	45	4471	20	8695
95	10	69	697	44	4679	19	8750
94	13	68	799	43	4922	18	8818
93	14	67	886	42	5161	17	8866
92	16	66	983	41	5378	16	8919
91	20	65	1067	40	5578	15	8967
90	25	64	1175	39	5819	14	9017
89	30	63	1288	38	6030	13	9058
88	36	62	1413	37	6252	12	9093
87	41	61	1530	36	6451	11	9121
86	50	60	1675	35	6674	10	9150
85	57	59	1816	34	6880	9	9174
84	67	58	1943	33	7070	8	9184
83	79	57	2090	32	7246	7	9192
82	92	56	2243	31	7414	6	9205
81	113	55	2409	30	7545	5	9213
80	136	54	2581	29	7695	4	9214
79	156	53	2746	28	7843	3	9215
78	192	52	2929	27	7987	2	
77	238	51	3115	26	8115	1	
76	279	50	3324	25	8244	0	9218
75	317						

N.B. These rankings pertain to official contestants only. /

N.B. Ces rangs ne s'appliquent qu'aux concurrents officiels.

Distribution of Marks / Distribution des points

This chart pertains to official contestants only. / Le graphique s'applique qu'aux concurrents officiels.

Number of competitors: 9218

Average Mark: 45.48

Score/ Note	Percentage of Students/ Pourcentage des étudiants	Cumulative Percentage/ Pourcentage accumulé
81-100	1.5	1.5
76-80	2.0	3.4
71-75	3.4	6.8
66-70	4.7	11.6
61-65	6.6	18.2
56-60	8.0	26.1
51-55	9.9	36.0
46-50	12.4	48.5
41-45	12.0	60.5
36-40	11.9	72.4
31-35	9.4	81.8
26-30	7.6	89.4
21-25	4.9	94.3
0-20	5.7	100.0

2012
Euclid Contest/Concours Euclide
Team Honour Rolls/Palmarès d'équipes

Rank/ Rang	School/ École	City/ Ville	Score/ Score
1	Bayview S.S.	Richmond Hill	278
2	Upper Can Col-Upper School	Toronto	276
3	Lord Byng S.S.	Vancouver	272
4	Marc Garneau C.I.	North York	271
5	York Mills C.I.	North York	268
6	Sir Winston Churchill S.S.	Vancouver	265
7	Lisgar C.I.	Ottawa	263
8	West Vancouver S.S.	West Vancouver	262
9	Colonel By S.S.	Gloucester	260
10	Vincent Massey S.S.	Windsor	259
11	Burnaby North S.S.	Burnaby	258
12	University of Toronto Schools	Toronto	257
13	Earl Haig S.S.	North York	255
13	Markham District H.S.	Markham	255
15	Lester Pearson College	Victoria	254
15	Walter Murray C.I.	Saskatoon	254
17	Don Mills C.I.	North York	253
18	North Toronto C.I.	Toronto	252
19	St. George's School	Vancouver	251
20	A.Y. Jackson S.S.	North York	250
20	Bell H.S.	Nepean	250
20	Richmond Hill H.S.	Richmond Hill	250
23	Henry Wise Wood Sr. H.S	Calgary	249
24	Pinetree S.S.	Coquitlam	248
25	A.B. Lucas S.S.	London	247
26	Waterloo C.I.	Waterloo	244
27	Dr. Norman Bethune C.I.	Scarborough	242
28	R.E. Mountain S.S.	Langley	241
28	William Lyon Mackenzie C.I.	North York	241
30	Agincourt C.I.	Scarborough	240
31	Eric Hamber S.S.	Vancouver	239
31	Pierre Elliott Trudeau H.S.	Markham	239
31	The Woodlands School	Mississauga	239
31	Western Canada H.S.	Calgary	239
35	Marianopolis College	Westmount	238
35	Sir John A. Macdonald C.I.	Scarborough	238
37	Albert Campbell C.I.	Scarborough	237
37	Markville S.S.	Markham	237
37	Moscrop S.S.	Burnaby	237
40	Fieldstone Day School	North York	236
40	L'Amoreaux C.I.	Scarborough	236
40	Michael Power-St Joseph	Etobicoke	236
40	Sir John A. Macdonald S.S.	Waterloo	236
44	Martingrove C.I.	Etobicoke	235
44	Semiahmoo S.S.	Surrey	235
44	St. John's-Ravenscourt School	Winnipeg	235
47	Kitsilano S.S. (English)	Vancouver	234
47	Pickering H.S.	Ajax	234
49	Fraser Heights S.S.	Surrey	233
49	Thornhill S.S.	Thornhill	233

2012
Euclid Contest/Concours Euclide
Student Honour Rolls/Palmarès d'étudiants

Name/ Nom		School/ École	Location/ Endroit	Grade/ Niveau
Group I/Groupe I		Scores/Notes 100 - 98		
BRENNAN	MATTHEW	Upper Can Col-Upper School	Toronto	12
KANG	DONG WON	North Toronto C.I.	Toronto	11
LAI	LEO	Sir Winston Churchill S.S.	Vancouver	11
RICKARDS	JAMES	Colonel By S.S.	Gloucester	12
SPIVAK	DANIEL	Bayview S.S.	Richmond Hill	11

Group II/Groupe II		Scores/Notes 97 - 91		
BUTERIN	VITALIK	The Abelard School	Toronto	12
DU	RICHARD	Marc Garneau C.I.	North York	9
GO	HARRY	R.E. Mountain S.S.	Langley	12
JJIN	TIANRE	Pearson Int'l College	Toronto	12
LIM	URSULAANN	Burnaby North S.S.	Burnaby	11
LIU	YI	York Mills C.I.	North York	12
LU	LIWEN	Vincent Massey H.S.	Brandon	12
MOLINA	ANTONIO	Ste. Anne	Fredericton	10
SUN	SUSAN	West Vancouver S.S.	West Vancouver	12
TANG	HENRY HEN	Bayview S.S.	Richmond Hill	12
TANG	JOHNNY	Markham District H.S.	Markham	10
TANG	MU	Lord Byng S.S.	Vancouver	11
TEITELBAUM	JORDAN	Tanenbaum CHAT	Maple	12
WANG	ZI HAO	Lord Byng S.S.	Vancouver	12
WU	YONGYI	Lester Pearson College	Victoria	12
WUI	FEI	Upper Can Col-Upper School	Toronto	10
XIE	YUKUAN	Don Mills C.I.	North York	11
YU	DARIN	L'Amoreaux C.I.	Scarborough	12
ZHOU	KEVIN	Woburn C.I	Scarborough	12

Group III/Groupe III		Scores/Notes 90 - 86		
CAO	RUN ZE	Martingrove C.I.	Etobicoke	12
CHEN	GREGORY	Thornhill S.S.	Thornhill	12
CHEN	LETIAN	Vincent Massey S.S.	Windsor	10
CHOW	MICHAEL	Albert Campbell C.I.	Scarborough	10
DONG	ANQI	Walter Murray C.I.	Saskatoon	12
GAO	YIFAN	Fieldstone Day School	North York	12
GENG	QINYI	West Vancouver S.S.	West Vancouver	11
GERSHON	ARIEL	William Lyon Mackenzie C.I.	North York	12
GU	BAILEY	Lisgar C.I.	Ottawa	11
HUANG	ROBERT	Semiahmoo S.S.	Surrey	11
HUANG	TOMMY	Bayview S.S.	Richmond Hill	11
JIN	BILLY	Waterloo C.I.	Waterloo	10
KIM	EUN KEE	Mentor College	Mississauga	10
LI	CHUNXIAO	Toronto Int'l Academy	Mississauga	12
LI	GORDON	Lord Byng S.S.	Vancouver	11
LI	SALL	Marc Garneau C.I.	North York	12
LI	ZI YAN	St. George's School	Vancouver	10
LUO	KEVIN	Eric Hamber S.S.	Vancouver	12
PANG	MICHAEL	St. John's-Ravenscourt School	Winnipeg	9
PEI	YAN RU		Burnaby	10
SALAZAR	JULIAN	Henry Wise Wood Sr. H.S	Calgary	12
SEYED GHASEMIP	SEYED KAM	Earl Haig S.S.	North York	11
SONG	RUI	Walter Murray C.I.	Saskatoon	11
TONG	FREID	The Woodlands School	Mississauga	12

2012
Euclid Contest/Concours Euclide
Student Honour Rolls/Palmarès d'étudiants

Group III/Groupe III

Scores/Notes 90 - 86

TU	JAMES	York Mills C.I.	North York	11
WANG	SUNNY	Bell H.S.	Nepean	11
WU	HENRY	University of Toronto Schools	Toronto	10
WU	SUIZHI	Lester Pearson College	Victoria	11
WU	XIAOZE	Marc Garneau C.I.	North York	10
YU	STEVEN	Pinetree S.S.	Coquitlam	12
ZHA O	YI	Dewey College	Mississauga	12
ZHU	MICHAEL	Lisgar C.I.	Ottawa	11

Group IV/Groupe IV

Scores/Notes 85 - 82

AHN	SUNGIL	Yale S.S.	Abbotsford	9
BAHRY	MATTHEW	Lawrence Park C.I.	Toronto	12
CAI	JOSEPH	Milliken Mills H.S.	Markham	12
CHANDAN	RAHUL	Merivale H.S.	Nepean	12
CHANG	CHEN	Vincent Massey S.S.	Windsor	10
CHEN	MARIA	Moscrop S.S.	Burnaby	11
CHEN	WINNIE	Claremont S.S.	Victoria	12
CHEN	ZHUO	Burnaby North S.S.	Burnaby	12
CHENG	RAYMOND	Sir Winston Churchill S.S.	Vancouver	12
CHIU	JASON	St. George's School	Vancouver	12
CHO	RAYMOND	West Vancouver S.S.	West Vancouver	12
CHU	WEILIAN	Old Scona Academic H.S.	Edmonton	11
CUI	WILLIAM	Pierre Elliott Trudeau H.S.	Markham	12
GUAN	MELODY	University of Toronto Schools	Toronto	12
HAN	YIFEI	Burnaby North S.S.	Burnaby	11
HUANG	TOM	Richmond Hill H.S.	Richmond Hill	11
JIN	YOLANDA	Markville S.S.	Markham	12
KIM	KUN	St. George's School	Vancouver	11
LI	BAI	Henry Wise Wood Sr. H.S	Calgary	12
LI	JIA SHU	West Vancouver S.S.	West Vancouver	12
LI	NANCY ZHY	Vincent Massey S.S.	Windsor	12
LI	SHU HAO	University Transition Program	Vancouver	9
LIANG	JING JING	Balfour C.I.	Regina	12
LIANG	QIAN	A.Y. Jackson S.S.	North York	11
LIM	HO JUN	Gleneagle S.S.	Coquitlam	11
LIN	JIAWEI	John Diefenbaker H.S.	Calgary	12
LIU	JANE	Newtonbrook S.S.	North York	11
MORENZ	KAREN	University of Toronto Schools	Toronto	12
NG	YAN HUNG	A.B. Lucas S.S.	London	12
QIU	BRYAN	Richmond Hill H.S.	Richmond Hill	11
SARKAR	PRATYUSH	Michael Power-St Joseph	Etobicoke	12
SITHAMPARAPILL	ARUN	Markham District H.S.	Markham	12
SONG	DAVID	Bloor C.I.	Toronto	11
SONG	GEOFFRY	Lisgar C.I.	Ottawa	12
WANG	ALEX	A.Y. Jackson S.S.	North York	12
WANG	FENGYANG	Sir John A. Macdonald S.S.	Waterloo	9
WANG	JERRY	Cawthra Park S.S.	Mississauga	10
WU	GONGHAO	York Mills C.I.	North York	12
WU	JINMING	Dr. Norman Bethune C.I.	Scarborough	12
WU	SHUHAO	Lo-Ellen Park S.S.	Sudbury	12
WU	TONY	Dr. Norman Bethune C.I.	Scarborough	11
WU	YI DI	Vincent Massey S.S.	Windsor	10
XU	NATHANIEL	Earl Haig S.S.	North York	10
XU	SHU	Bronte College Of Canada	Mississauga	12
XUE	DAVID	Earl Haig S.S.	North York	12
XUE	JENNY	Moira S.S.	Belleville	12

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Student Honour Rolls/Palmarès d'étudiants

Group IV/Groupe IV

Scores/Notes 85 - 82

YAN	JERRY	Richmond Hill H.S.	Richmond Hill	12
YANG	FAN	A.B. Lucas S.S.	London	12
YANG	YOUNG	Fraser Heights S.S.	Surrey	11
ZHAN	ERIC	University of Toronto Schools	Toronto	12
ZHANG	GAVIN	Sir Winston Churchill S.S.	Vancouver	10
ZHAO	BO YANG		Montreal	12
ZHAO	LINDA	Sir Winston Churchill H.S.	Calgary	11
ZHAOYANG	WANG	A.Y. Jackson S.S.	North York	11
ZHOU	WUHAN	Vincent Massey S.S.	Windsor	11
ZOU	TONY	Bell H.S.	Nepean	10

Group V/Groupe V

Scores/Notes 81 - 78

BAEK	ANDY	Colonel By S.S.	Gloucester	11
BAI	GEORGE	University of Toronto Schools	Toronto	12
CHEN	DAVID	Ross Sheppard Comp. H.S.	Edmonton	11
CHEN	HENRY O	University of Toronto Schools	Toronto	12
CHEN	JEFFREY	Sir William Mulock S.S.	Newmarket	12
CHEN	SHIHLUNG	Ridley College	St Catharines	12
CHOU	CHING HSI	King's-Edgehill School	Windsor	11
CHU	ERIC	Moscrop S.S.	Burnaby	12
DAI	WENJIA	Riverdale C.I.	Toronto	12
DENG	MICHAEL	Western Canada H.S.	Calgary	11
DUAN	JUNRAN	Sir John A. Macdonald C.I.	Scarborough	11
FAN	DAIWEI	Campbell C.I.	Regina	12
FEHR	LUKAS	Walter Murray C.I.	Saskatoon	12
FUNG	ALEXANDER	University of Toronto Schools	Toronto	12
GATEA	ALEXANDRU	Waterloo C.I.	Waterloo	11
GE	SABRINA	University of Toronto Schools	Toronto	10
GUO	LINGQING	University of Toronto Schools	Toronto	12
HA	VIOLET	Pinetree S.S.	Coquitlam	11
HE	TIANYI	Kitsilano S.S. (English)	Vancouver	12
HSU	SZU CHEN	Marianopolis College	Westmount	12
HUANG	JIAQI	Rockridge S.S.	West Vancouver	11
HUANG	RUNSHENG	Agincourt C.I.	Scarborough	12
HUI	DANIEL	Windsor S.S.	North Vancouver	12
JANMOHAMED	ALYF	Upper Can Col-Upper School	Toronto	11
JAYACHANDIRAN	VINAY	Vincent Massey S.S.	Windsor	12
JIANG	RUI XIN	Sir John A. Macdonald C.I.	Scarborough	12
JIN	HAN	Columbia Int'l College	Hamilton	12
KANG	ANDREW	St. Michael's Univ. School	Victoria	10
KANG	JU HEE	Kitsilano S.S. (English)	Vancouver	11
KENNEDY	CHRISTOPH	Ashbury College	Rockcliffe	12
KHONG	EDBERT	Pickering H.S.	Ajax	11
KIM	JI SUP	Yale S.S.	Abbotsford	11
KIM	JINSOO	Sir Frederick Banting S.S.	London	12
KNYAZHEVSKIY	ALEXANDER	St. Theresa of Lisieux C.H.S.	Richmond Hill	12
KONG	ANGUS	Vincent Massey S.S.	Windsor	11
KONG	NATHAN	Upper Can Col-Upper School	Toronto	12
LAVI	EILON	A.B. Lucas S.S.	London	10
LEE	JAE JOON	Shawnigan Lake School	Shawnigan Lake	11
LI	HAO NAN	Magee S.S.	Vancouver	12
LI	JIAQI	Horton H.S.	Wolfville	12
LIN	BORIS	Elgin Park S.S.	Surrey	12
LIN	CHARLES	Ont. Science Centre Science School	North York	12
LIN	LEO	Richmond Green S.S.	Richmond Hill	12

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LIN	SIYU	Don Mills C.I.	North York	12	
LIN	YI	Don Mills C.I.	North York	12	
LIU	FRANK	Steveston London S.S.	Richmond	12	
LIU	MIRANDA	Dr. G.W. Williams S.S.	Aurora	12	
LIU	RAY	Dr. Norman Bethune C.I.	Scarborough	12	
LIU	YE	Victoria Park C.I.	North York	12	
LIU	W	QIAOZHI	Prince of Wales S.S.	Vancouver	12
LU	THOMAS	Markham District H.S.	Markham	11	
MA	FANG	Bayview S.S.	Richmond Hill	12	
MA	KIM	Agincourt C.I.	Scarborough	11	
MA	RICHARD	The Woodlands School	Mississauga	12	
MITCHELTREE	CHRISTOPH	Halifax West H.S.	Halifax	12	
NELSON	HUCK	I. E. Weldon S.S.	Lindsay	12	
NG	MATTHEW	St. Francis Xavier S.S.	Mississauga	12	
PAN	ERIC	London Central S.S.	London	10	
PARK	JOHN	Pinetree S.S.	Coquitlam	12	
PARK	SANG WOO	King's Christian Collegiate	Oakville	10	
PATEL	KRAMAY	William Lyon Mackenzie C.I.	North York	12	
PAUIG	JOSE RAMO	Halifax Grammar School	Halifax	12	
QIAN	YINGJIE	Bulkley Valley Christian School	Smithers	12	
QIU	BOBBY	Don Mills C.I.	North York	11	
QIU	WANCHENG	Crescent Heights H.S.	Calgary	12	
REN	KEVIN	Pickering H.S.	Ajax	11	
REN	TONY	Bayview S.S.	Richmond Hill	11	
SISSON	DESMOND	Western Canada H.S.	Calgary	10	
SIU	KEVIN	Agincourt C.I.	Scarborough	12	
SU	CHANG	Western Canada H.S.	Calgary	12	
SU	JOE	Lisgar C.I.	Ottawa	12	
SU	PEIRAN	Vaughan S.S.	Thornhill	12	
SU	ZICHUAN	Marianopolis College	Westmount	12	
SUKMADJI	ALVIN Y	Earl Haig S.S.	North York	12	
SUN	YIFEI	Agincourt C.I.	Scarborough	12	
SUNG	KI WOONG	Eric Hamber S.S.	Vancouver	12	
SUO	SHUN DA		North York	11	
TAM	BRIAN	Magee S.S.	Vancouver	11	
TANG	JINGYUAN	Newmarket H.S.	Newmarket	12	
TANG	YUXIN	Don Mills C.I.	North York	12	
TAYLOR	RYAN	Michael Power-St Joseph	Etobicoke	12	
TIAN	JIM	University of Toronto Schools	Toronto	12	
TIAN	KEVIN	St. George's School	Vancouver	10	
TSAI	EDWARD	Vincent Massey S.S.	Windsor	11	
TSOUNG	THOMAS	St. George's School	Vancouver	11	
WANG	JESSE K	Lisgar C.I.	Ottawa	11	
WANG	LEXUAN	Seaquam S.S.	Delta	11	
WANG	OLIVIA	Sir John A. Macdonald C.I.	Scarborough	12	
WANG	YIDI	Columbia Int'l College	Hamilton	12	
WANG	YOUCHEN	Earl Haig S.S.	North York	12	
WANG	ZIHUI	Harry Ainlay H.S.	Edmonton	12	
WEI	YUANHAO	Earl of March S.S.	Kanata	11	
WOO	JAY YOUNG	London Central S.S.	London	12	
WU	KEVIN		North York	11	
WU	MOHAN	Vincent Massey S.S.	Windsor	10	
WU	YUHUI	Fredericton H.S.	Fredericton	11	
XIA	YVCHEN	Earl Haig S.S.	North York	11	
XIAO	WENQING	Strathmore H.S.	Strathmore	12	
XING	SHURAN	Hugh McRoberts S.S.	Richmond	12	
XU	CHENGCHEN	York Mills C.I.	North York	12	

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XU	DENNIS	Abbey Park H.S.	Oakville	11
XU	GENGYU	Sir John A. Macdonald C.I.	Scarborough	12
XU	MAXIME	Colonel By S.S.	Gloucester	11
XU	ROBBIN	Lisgar C.I.	Ottawa	10
XU	STEPHEN	Bell H.S.	Nepean	10
YAN	SHUYA	Fieldstone Day School	North York	12
YANG	JING BO	John Fraser S.S.	Mississauga	11
YANG	KELVIN	Marianopolis College	Westmount	13
YANG	MINGYUE	Unionville H.S.	Markham	11
YAO	YUAN	Colonel By S.S.	Gloucester	11
YEE	BRANDON	Sacred Heart C.H.S.	Newmarket	12
YEH	OWEN W	Earl Haig S.S.	North York	12
YOUNG	SANDRO	Lisgar C.I.	Ottawa	12
ZHANG	JUSTIN	Dr. Norman Bethune C.I.	Scarborough	12
ZHANG	RICHARD	Oakville Trafalgar H.S.	Oakville	11
ZHANG	STEVEN	West Vancouver S.S.	West Vancouver	11
ZHAO	BILL	A.Y. Jackson S.S.	North York	12
ZHAO	JONATHAN	North Toronto C.I.	Toronto	12
ZHAO	MIKE	Pierre Elliott Trudeau H.S.	Markham	11
ZHENG	BONING	A.Y. Jackson S.S.	North York	12
ZHOU	TIANYU	Mount Douglas S.S.	Victoria	12
ZHU	JIA LIN	Unionville H.S.	Markham	12
ZHU	XINWEN	Marianopolis College	Westmount	12
ZI	YANG TIAN	Dr. Norman Bethune C.I.	Scarborough	11
ZINCK	ALEXANDER	Citadel H.S.	Halifax	12

UNOFFICIAL STUDENTS / ÉLÈVES NON-OFFICIEL

Name/Nom		School/École	Location/Endroit
GROUP I /	GROUPE I	SCORES / NOTES 100 - 98	
YUAN	GAO	Anglo-Chinese School	Singapore
TRUNG HIEU	LE	Anglo-Chinese School	Singapore
KHAI	VO HOANG	Anglo-Chinese School	Singapore
YUE	YU	Qingdao Hongguang Foreign Language College	Qingdao, China
HANTAO	ZHANG	Suzhou High School	Suzhou, China
HANRUI	ZHENG	Jinling H.S.	Nanjing, China
GROUP II /	GROUPE II	SCORES / NOTES 97 - 87	
HAIKAL	ABDULLAH ZAIN	NUS H.S. of Mathematics and Science	Singapore
ZILING	CHEN	Shenzhen M.S.	Shenzhen, China
AIXUAN	DAI	Cambridge Int'l Centre of Shanghai Normal University	Shanghai, China
TONG	DING	Nanjing Foreign Language School	Nanjing, China
YUZHE	GAO	No 2 Middle School/Shanghai Jiao Tong University	Shanghai, China
JIEXI	GUO	Jinling H.S.	Nanjing, China
TRUNG	HA QUANG	NUS H.S. of Mathematics and Science	Singapore
SHI	HU	Dalian Maple Leaf Int'l School	Dalian, China
YIFAN	HU		Beijing, China
YUNG CHUA	HUANG	Taipei Municipal Jianguo H.S.	Taipei City, Taiwan
LIM	JECK	NUS H.S. of Mathematics and Science	Singapore
HEXING	LAI		Shanghai, China
JIAEN	LI	Qingdao Hongguang Foreign Language Coll.	Qingdao, China
ZIXIN	LI	Jinling H.S.	Nanjing, China
XIJIN	LIANG	Chengdu Foreign Language School	Chengdu, China
CHANGSHUO	LIU	Anglo-Chinese School	Singapore
DHRUV	MEDARAMETLA	ICAE	Troy, MI
LING	MENG		Beijing, China
CHINMAY	NIRKHE	Lakeside School	Seattle, WA
AKHIL	NISTALA	ICAE	Troy, MI
RAGHAV	PRABHU	ICAE	Troy, MI
YAKANG	QI	Cambridge Int'l Ctr. of Shanghai Normal University	Shanghai, China
ZHIQIANG	QIU	Nanjing Foreign Language School	Nanjing, China
JOSEPH	RENZI	ICAE	Troy, MI
RAFAY	SHAHID BAHRI	K.C.K. P.S.	Karachi, Pakistan
CIYUE	SHEN		Shanghai, China
APURVA	SHRIVASTAVA	ICAE	Troy, MI
FEI	SUN	Wuhan Maple Leaf Int'l School	Wuhan, China
LE NGUYEN	VUONG LINH	Anglo-Chinese School	Singapore
ZIQUAN	WANG	Wuxi No1 H.S	Wuxi, China
ZIHAO	WU		Shanghai, China
WEN SHUO	YANG	Ulink College of Suzhou Industrial Park	Suzhou, China
XUELING	YANG	Guangdong Experimental H.S.	Guangzhou, China
CHAI	YIREN		Beijing, China
YUANDI	ZHANG	Fredericton H.S.	Fredericton, NB
YISHA	ZHAO	Hangzhou Foreign Language School	Hangzhou, China