

## The CENTRE for EDUCATION in MATHEMATICS and COMPUTING

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

www.cemc.uwaterloo.ca

2011 2011

Results Résultats

 $egin{array}{ll} Fryer & Contest & Concours & Fryer \ {}^{(Grade \ 9)} & {}^{(g^e \ ann\'ee \ - \ Sec. \ III)} \end{array}$ 

Galois Contest Concours Galois

 $(10^e \ ann\'ee - Sec. \ IV)$ 

Hypatia Contest Concours Hypatie

(Grade 11) (11<sup>e</sup> année – Sec. V)

UNIVERSITY OF **WATERLOO**  ATERLOO







LA PARFAITE ALLIANCE COMMUNAUTAIREM







## Centre for Education in Mathematics and Computing Faculty and Staff / Personnel du Centre d'éducation en mathématiques et informatique

Ed Anderson

Lloyd Auckland

Terry Bae

Steve Brown

Ersal Cahit

Karen Cole

Jennifer Couture

Serge D'Alessio

Frank DeMaio

Fiona Dunbar

Mike Eden

Barry Ferguson

Barb Forrest

Judy Fox

Steve Furino

John Galbraith

Sandy Graham

Angie Hildebrand

Judith Koeller

Joanne Kursikowski

Bev Marshman

Dean Murray

Jen Nissen

J.P. Pretti

Linda Schmidt

Kim Schnarr

Jim Schurter

Carolyn Sedore

Ian VanderBurgh

Troy Vasiga

#### Problems Committee / Comité des problèmes

Judith Koeller (Chair / présidente), University of Waterloo, Waterloo, ON

Lino Demasi, Simon Fraser University, Burnaby, BC

Rad dePeiza, Toronto, ON

Sandy Emms Jones, Forest Heights C.I., Kitchener, ON

Shawn Godin, Cairine Wilson S.S., Orleans, ON

André Ladouceur, Gloucester, ON

Peter O'Hara, London, ON

Paul Ottaway, University of British Columbia, Vancouver, BC

Judy Shanks, Pickering H.S., Ajax, ON

#### **Overall Comments**

The year 2011 marked the ninth writings of the Fryer, Galois and Hypatia Contests. The FGH Contests are designed to give students in Grades 9, 10 and 11 an additional mathematical challenge during the school year, and one that requires full written solutions. Being able to do mathematics is an important skill; being able to communicate one's findings (in mathematics or in any other field) is also very important.

We were very pleased this year to see another healthy increase in the number of participants in these Contests. In general, many students writing these Contests are doing a better job each year of writing clear solutions to the problems. That being said, there is always work that can be done to help them improve these skills. Some students reduced their scores because they gave answers rather than solutions or presented untidy or illegible solutions.

The averages on the Fryer, Galois and Hypatia Contests this year were 23.8, 24.2 and 23.4, respectively. We will continue to try to keep the averages on these papers in this range. Here are some specific comments on the problems.

#### **Fryer Contest**

1. Average: 8.5

This question was done very well by most students, with very few consistent errors.

2. Average: 7.6

Parts (a) and (b) of this problem were done quite well, except for a few arithmetic mistakes or misuses of the Pythagorean Theorem. In part (c), only a fraction of the students who wrote the contest were able to connect their work from parts (a) and (b) to the configuration given.

3. Average: 5.6

This question was done reasonably well by most students. The most consistent issue noted by the marking team was a lack of explanation of how answers were obtained in parts (b) and (c). Because the problem asks to "Determine all...", the students' explanations needed to demonstrate somehow that they had found all possible answers.

4. Average: 2.1

Part (a) was done well by most students. Parts (b) and (c) were quite difficult and were only completed by a handful of students.

#### **Galois Contest**

1. Average: 8.1

This question was well done by most students. A few students did part (a) correctly obtaining a second term of -1 but when completing the remaining parts assumed that -1 was the first term. In part (c), most students discussed the fact that the terms repeated in a cycle of length three. In counting the number of 2s, some students did not correctly deal with the remainder when 670 was divided by 3. Students generally knew how to correctly approach part (d).

2. Average: 7.6

This question was well done by students. Most students were able to look at cases in part (a) and generally determined the other correct scores. In part (b), many students stated the correct answer but provided little or no justification at all. Some students knew that the sum 300 was important but were unable to determine what to do with it. In part (c), most students came up with the four correct possibilities. Some, however, missed the fact that two of the coins could be 0 resulting in 170 being a possible value for the third coin.

3. Average: 6.4

Part (a) of this question was well done. In part (b), students generally knew what was needed in order to show similarity but some of the solutions were poorly justified. In part (c), most students were able to get

the value QS = 7, but obtaining the correct value for  $SD = \frac{28}{3}$  proved to be much more challenging. In part (d), students generally knew what was required but were often unable to do follow through to the correct result. Some students determined the value of each of the angles using basic trigonometry. They used these approximate results in the last three parts of the question.

#### 4. Average: 2.1

If a student understood the notation they generally got the correct result for part (a). Many algebra mistakes occurred which prevented students from being able to get to the end of part (a) and through the first part of (b). A few brave students tried to find the correct result for part (b) using a trial and error approach. This approach did not yield good results. In part (c), many students came up with a correct expression for T(c)+T(d)=T(e) and determined that c+d+e=406, but few were able to substitute for e from the second equation into the first. Of those who did substitute correctly only a few simplified the expression correctly. Many algebra mistakes occurred in the simplification. Part (d) was only attempted by a few students and even fewer students were able to do anything significant with the given information. Some students were able to work a little with the fact that cd was divisible by 407, but did not use the prime factors 11 and 37 to go any further.

#### Hypatia Contest

- 1. Average: 8.2
  - This question was well done. In (d), there were many ways to approach finding the area of quadrilateral BDFE. Some students used properties of medians and the centroid to do this calculation.
- 2. Average: 7.2

Many students demonstrated a good understanding of this question. The quality of explanations given by students varied. Since the question did not specify that the given numbers were positive integers, some students considered negative numbers or even decimal numbers. Such solutions were accepted.

- 3. Average: 5.6
  - In part (a), most students were able to evaluate x, y and z. In part (b), a common error was to look at specific values of x, y and z that did (or did not) give y as an integer, and to try to generalize from a few values. In part (c), some students recognized that  $3 \times 5 \times 2 = 30$  and that  $30^2 = 900$ , but could not logically connect this to the value of xyz.
- 4. Average: 2.4

In part (a), most students were able to list the 6 representations of 8 and determine that F(8) = 6. In part (b), many students looked at the values F(5), F(6), F(7), F(8) and from these concluded that F(n+1) > F(n) for all n. Showing a few examples does not prove this general statement. Other students found that F(5) = 3, F(6) = 5 and F(8) = 6, and so concluded that F(n) = n - 2 for every value of n. This is false, since F(10) = 10, for example. In part (c), there were some nice attempts to create representations for 2n by combining representations for n. A common error was to combine them in a way that double-counts them.

Please visit our website at www.cemc.uwaterloo.ca to download the 2011 Fryer, Galois and Hypatia Contests, plus full solutions.

#### Commentaires généraux

L'année 2011 est la neuvième édition des concours Fryer, Galois et Hypatie. Les concours de FGH ont été créés pour donner aux étudiants de 9e, 10e et 11e année (sec. III, IV et V) un défi mathématique supplémentaire pendant l'année scolaire qui exige des solutions écrites complètes. Être capable de faire des mathématiques est une aptitude importante. Pouvoir communiquer ses conclusions (en mathématiques ou autres domaines) est aussi très important.

Nous sommes ravis cette année de constater une croissance du nombre de participants à ces concours. En général, plusieurs des étudiants participant à ces concours s'améliorent d'année en année en ce qui concerne écrire des solutions claires. Cependant, il y a toujours du travail à faire pour les aider à développer leurs aptitudes. Certains des étudiants ont eu des notes plus basses car ils présentaient uniquement des réponses au lieu de solutions ou des solutions non soignées ou illisibles.

Cette année, les moyennes des concours Fryer, Galois et Hypatie étaient de 23,8, 24,2 et 23,4 respectivement. Nous tenterons de continuer à conserver cette gamme pour les moyennes de ces examens. Voici quelques commentaires spécifiques sur les problèmes de ces examens.

#### Concours Fryer

1. Movenne: 8,5

Cette question a été bien réussie par la plupart des élèves. Il y avait très peu d'erreurs communes.

2. Moyenne: 7,6

À l'exception de quelques erreurs de calcul ou d'une mauvaise utilisation du théorème de Pythagore, les parties (a) et (b) ont été très bien réussies. Dans la partie (c), seule une fraction des élèves a réussi à voir le lien avec les parties (a) et (b).

3. Moyenne: 5,6

La question a été assez bien réussie par la plupart des élèves. La faiblesse la plus commune était le manque de justification de son travail dans les parties (b) et (c). À cause de la consigne ¡¡Déterminer ...;;, les élèves doivent expliquer leur raisonnement et justifier qu'ils ont trouvé toutes les réponses.

4. Moyenne: 2,1

La partie (a) a été bien réussie par la plupart des élèves. Les parties (b) et (c) étant trés difficiles, elles n'ont été réussies que par une poignée d'élèves.

#### **Concours Galois**

1. Moyenne: 8,1

Cette question a été bien réussie par la plupart des élèves. Quelques élèves ont réussi la partie (a) pour obtenir un deuxième terme égal à -1, mais dans les parties suivantes, ils ont supposé que -1 était le premier terme. Dans la partie (c), la plupart des élèves ont mentionné que les termes se répétaient selon un cycle de longueur 3. En comptant le nombre de termes qui égalent 2, quelques élèves ont mal traité du reste lorsque 670 a été divisé par 3. En général, les élèves ont su comment traiter de la partie (d).

2. Moyenne: 7,6

Cette question a été bien réussie par la plupart des élèves. Dans la partie (a), la plupart des élèves ont réussi à déterminer les résultats possibles et de là, les sommes possibles. Dans la partie (b), un grand nombre d'élèves ont donné la bonne réponse sans justification. Certains élèves savaient que 300 avait une certaine importance, mais ne savaient pas comment l'utiliser. Dans la partie (c), la plupart des élèves ont reconnu les quatre possibilités. Certains n'ont pas reconnu que deux jetons pouvaient indiquer un 0 et que le troisième jeton pouvait donc indiquer 170.

3. Moyenne: 6,4

La partie (a) a été bien réussie. Dans la partie (b), les élèves savaient quoi faire, mais certaines présentations

manquaient de justification. Dans la partie (c), la plupart des élèves ont réussi à obtenir QS=7. L'obtention de la valeur  $SD=\frac{28}{3}$  a présenté un plus grand défi. En général, dans la partie (d), les élèves semblaient savoir quoi faire, sans toujours aboutir à la bonne réponse. Certains élèves ont déterminé la mesure approximative de chaque angle à l'aide des rapports trigonométriques. Ils ont ensuite utilisé ces mesures approximatives dans les autres parties de la question.

#### 4. Moyenne: 2,1

En général, les élèves qui comprenaient la notation ont réussi la partie (a). Des erreurs de manipulation algébrique n'ont pas permi à des élèves de terminer la partie (a) et d'entamer la partie (b). Quelques braves ont utilisé une approche par essais systématiques pour résoudre la partie (b), ce qui n'a pas porté fruit. Dans la partie (c), bon nombre d'élèves ont obtenu une bonne expression algébrique pour remplacer T(c) + T(d) = T(e). Ils ont ensuite déterminé que c + d + e = 406, mais peu d'entre eux ont isolé e dans la deuxième équation pour le reporter dans la première. Même parmi ceux qui l'ont tenté, peu ont simplifié correctement. Les erreurs algébriques étaient nombreuses. Peu d'élèves ont tenté de résoudre la partie (d). Peu d'entre eux ont réussi à avancer de façon significative. Quelques élèves ont tenté d'utiliser le fait que cd est divisible par 407, mais ils n'ont pas utilisé les diviseurs premiers, 11 et 37, pour poursuivre.

#### Concours Hypatie

#### 1. Moyenne: 8,2

Cette question a été bien réussie. Dans la partie (d), il y avait une variété d'approches pour déterminer l'aire du quadrilatère BDFE. Certains élèves ont utilisé les médianes et les propriétés du centre de gravité pour déterminer la réponse.

#### 2. Moyenne: 7,2

Un grand nombre d'élèves ont démontré une bonne compréhension du problème. La qualité des explications variait beaucoup.

#### 3. Moyenne: 5,6

Dans la partie (a), la plupart des élèves ont déterminé la valeur de y et celle de z. Dans la partie (b), bon nombre d'élèves ont tenté de déterminer des valeurs particulières de x, de y et de z et de généraliser à partir de quelques valeurs, ce qui ne constitue pas une preuve. Dans la partie (c), quelques élèves ont remarqué que  $3 \times 5 \times 2 = 30$  et que  $30^2 = 900$ , sans réussir à relier ces résultats à la valeur de xyz.

#### 4. Moyenne: 2,4

Dans la partie (a), la plupart des élèves ont réussi à donner les 6 représentations de 8 et à montrer que F(8) = 6. Dans la partie (b), bon nombre d'élèves ont regardé les valeurs de F(5), F(6), F(7) et F(8) pour conclure que F(n+1) > F(n) pour toute valeur de n. On ne peut démontrer la validité d'un énoncé général en montrant celle de quelques exemples particuliers. D'autres ont utilisé F(5) = 3, F(6) = 5 et F(8) = 6 pour conclure que F(n) = n - 2 pour toute valeur de n. Cette conclusion est fausse, puisque F(10) = 10. Dans la partie (c), des élèves ont tenté de créer des représentations de 2n en combinant des représentations de n. C'était bien pensé, mais souvent, les combinaisons faisaient en sorte que certaine représentations étaient comptées deux fois.

Veuillez visiter notre site Web à www.cemc.uwaterloo.ca pour télécharger les concours Fryer, Galois et Hypatie 2011, avec solutions complètes.

Enrollment Inscription

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

	Enrollment/
	Inscription
NL	16
NS	206
NB	138
PE	34
QC	559
ON	7355
MB	347
SK	58
AB	812
BC	1785
International	2599
Total	13909

Score/ Note	Fryer Rank/ Position	Galois Rank/ Position	Hypatia/ Hypatie Rank/ Position
<u>40</u>	1	1	1
39	3	3	3
38	6	8	8
37	12	$\frac{3}{22}$	18
36	28	71	31
35	51	113	87
34	87	175	132
33	146	276	217
32	232	392	321
31	347	559	487
30	489	692	637
29	683	874	783
28	897	1090	934
27	1119	1308	1113
26	1390	1545	1287
25	1647	1785	1463
24	1916	2003	1675
23	2168	2207	1863
22	2399	2389	2042
21	2613	2537	2204
20	2800	2684	2347
19	2943	2829	2492
18	3055	2963	2636
17	3145	3083	2749
16	3259	3181	2853
15	3346	3269	2954
14	3415	3348	3039
13	3489	3422	3123
12	3540	3476	3184
11	3584	3531	3244
10	3626	3564	3296
9	3654	3603	3336
8	3678	3635	3357
7	3704	3660	3390
6	3719	3682	3422
5	3732	3692	3445
4	3737	3710 2716	3467
3	3744 2751	3716	3477
2	3751 2759	3723 2725	3482
1	3758	3725	3489
0	3759		3491

N.B. These rankings pertain to ALL contestants /

N.B. Ces rangs se rapportent à TOUS concurrents

The top 25% of the competitors in each of the three Contests were divided into three categories: Gold Standard, Silver Standard and Bronze Standard, in the ratio 1:2:3. The names of the those students achieving the Gold Standard (that is, scoring in roughly the top 4%) are listed alphabetically below for each Contest.

Les candidats qui se classent dans le premier quart de classement dans chacun des trois concours ont été répartis en trois catégories: le niveau or, le niveau argent et le niveau bronze, selon le ratio 1 : 2 : 3. Le nom des étudiants qui ont obtenu le niveau or (c'est-à-dire ceux qui se classent parmi les premiers 4 p. 100) est donné par ordre alphatbétique ci-dessous pour chaque concours.

Name/Nom		School/École	Logation /Endroit
SUJI	AN	West Vancouver S.S.	Location/Endroit West Vancouver, BC
KWESI	ASANTEY	London Central S.S.	London, ON
NATHANAEL	BALETE	Math Trainers Guild of Philippines	Zamboanga City, Philippines
ALEXANDRE	BEDARD	College St. Alexandre	Gatineau, QC
MICHELLE	BELIAVSKY	Thornhill S.S.	Thornhill, ON
TRISTAN	BERARD	Academie Antoine-Manseau	Joliette, QC
YANNIS	BI	ICAE	Troy, MI
LISA	BIAN	Waterloo C.I.	Waterloo, ON
MICHAEL	BRODETH	Math Trainers Guild of Philippines	Zamboanga City, Philippines
RYAN	BROWN	Vincent Massey S.S.	Windsor, ON
DAVID	CAI	Crescent School	North York, ON
VICTORIA	CAO	Vincent Massey S.S.	Windsor, ON
JUSTIN	CHAI	Upper Can College	Toronto, ON
ALVIN	CHAN	Fredericton H.S.	Fredericton, NB
ZHAO CONG	CHAN	Munsang College	Kowloon City, Hong Kong
CHEN	CHANG	Vincent Massey S.S.	Windsor, ON
FONDA	CHAU	Little Flower Academy	Vancouver, BC
DANIELLE	CHEN	Dr. Norman Bethune C.I.	Scarborough, ON
QINYUAN	CHEN	Fuyuan School	Shenzhen, China
RICHARD	CHEN	Queen Elizabeth H.S.	Calgary, AB
LISA	CHENG	Barrie North C.I.	Barrie, ON
STEVEN	CHENG	ICAE	Troy, MI
ANSON	CHEUNG	Academy for Gifted Children-PACE	Richmond Hill, ON
KINTON	CHEUNG	Upper Can College	Toronto, ON
MICHAEL	CHOW	Albert Campbell C.I.	Scarborough, ON
MEGAN	CHU	Bayview S.S.	Richmond Hill, ON
AUSTIN	CHUA	Math Trainers Guild of Philippines	Zamboanga City, Philippines
KATRINA	CIRONE	Earl Haig S.S.	North York, ON
COLLEEN	COADY	Ecole St. Matthew School	Calgary, AB
LYDIA	COLLINSON	Deole St. Matthew School	Mississauga, ON
HALEY	CUMMINGS	Balmoral Hall School	Winnipeg, MB
CASSIA	DEERING	Bluevale C.I.	Waterloo, ON
GEORGE	DONG	Branton J.H.S.	Calgary, AB
JEAN	DONG	Lord Byng S.S.	Vancouver, BC
MICHELLE	DONG	The Woodlands School	Mississauga, ON
GLEB	DZHUS	Christian Brothers College	Cork, Ireland
		Bnei Akiva School	
DAVID	ELHADAD		North York, ON
ANGELA	FAN	Bayview S.S.	Richmond Hill, ON
KATHY	FAN	Moscrop S.S.	Burnaby, BC
RENA	FAR	Queen Elizabeth H.S.	Calgary, AB
JERRY	FENG	Sandwich S.S.	Windsor, ON
CRAIG	FERNANDES	St. Joseph S.S.	Mississauga, ON
CHRISTMA	FERNANDO	St. Francis Xavier S.S.	Mississauga, ON
ALEXANDRU	FLOREA	Martingrove C.I.	Etobicoke, ON
COLE	FRIESEN	Westgate Mennonite C.I.	Winnipeg, MB
HAOWEI	GAO	Bayview S.S.	Richmond Hill, ON
MEGAN	GAO	Tom Baines School	Calgary, AB

Name/Nom		School/École	Location/Endroit
DIVYA	GOEL	ICAE	Troy, MI
AARON	GORDON	Kincardine D.S.S.	Kincardine, ON
LOGAN	GRAY	Branton J.H.S.	Calgary, AB
SHERRY	GUO	Martingrove C.I.	Etobicoke, ON
XIAO MEI	GUO	Francis Libermann C.H.S.	Scarborough, ON
ZIDU	GUO	Upper Can College	Toronto, ON
TARIQ	HAJI	Marc Garneau C.I.	North York, ON
DAMIAN	HALVORSEN		
		Forest Heights C.I.	Kitchener, ON
JACKY	HAN	St. Michael's Univ. School	Victoria, BC
DANIEL	HART	Jerudong Int'l School	Negara, Brunei Darussalam
EDWARD	НО	Marc Garneau C.I.	North York, ON
JASPER	HONG	University of Toronto Schools	Toronto, ON
RAYMOND	HONG	West Vancouver S.S.	West Vancouver, BC
DANCHENG	HU	Acadia Jr. H.S.	Winnipeg, MB
DANIEL	HUANG	St. John's-Ravenscourt School	Winnipeg, MB
SIMON	HUANG	Marc Garneau C.I.	North York, ON
VINEET	JAMMALAMADAKA	ICAE	Troy, MI
XINRUI	JIA	Vincent Massey S.S.	Windsor, ON
HELGA	JIANG	Vincent Massey S.S.	Windsor, ON
JIAHUI	JIANG	Bayview S.S.	Richmond Hill, ON
WILLIAM	JIANG	Windermere S.S.	Vancouver, BC
$\operatorname{BEN}$	JIN	Earl Haig S.S.	North York, ON
BILLY	JIN	Waterloo C.I.	Waterloo, ON
OANA	JUMANCA	College Jean Eudes	Montreal, QC
DANIEL	JUNG	Earl Haig S.S.	North York, ON
HUSSEINA	KAKAL	Woodbine Jr. H.S.	North York, ON
EDREA	KHONG	Pickering H.S.	Ajax, ON
DONG KYU	KIM	Port Moody Sr. S.S.	Port Moody, BC
CHELSEA	KIM	Abbey Park H.S.	Oakville, ON
JESSICA	KIM	Martingrove C.I.	Etobicoke, ON
YOUNG NAM	KIM	R.E. Mountain S.S.	Langley, BC
VALERIE	KOO	Havergal College	North York, ON
AKASH	KUMAR	ICAE	Troy, MI
CASSIDY	KUNICYN	St. Joseph's Morrow Park H.S.	North York, ON
CHI CHUN	KWAN	Munsang College	Kowloon City, Hong Kong
OH SEONG	KWON	0 0	Singapore
SEJIN	KWON	William Lyon Mackenzie C.I.	North York, ON
BORIS J T	LAI	Munsang College	Kowloon City, Hong Kong
QUINCY	LAM	Marc Garneau C.I.	North York, ON
CZARINA	LAO	Math Trainers Guild of Philippines	Zamboanga City, Philippines
ORSOLYA	LAPOHOS	Earl of March S.S.	Kanata, ON
LINDSAY	LAUDER	Branksome Hall	Toronto, ON
DAE HO	LEE	Earl Haig S.S.	North York, ON
OLIVER	LEE	Moscrop S.S.	Burnaby, BC
PAUL	LEE	Cameron Heights C.I.	Kitchener, ON
SALLY	LEE	West Vancouver S.S.	West Vancouver, BC
SOPHIA	LEE	R.E. Mountain S.S.	Langley, BC
LAURIE	LEE GLOVER	Queen Elizabeth H.S.	Calgary, AB
LINDA	LEUNG	Loretto Abbey C.S.S.	North York, ON
NICHOLAST	LEUNG	Sir Winston Churchill S.S.	Vancouver, BC
WING TUNG	LEUNG	Chinese Int'l School	Braemar Hill, Hong Kong
MATT	LEVESQUE	Grant Park H.S.	Winnipeg, MB
ALICE	LEVESQUE	Leaside H.S.	East York, ON
ANDREW	LI	Dr. Norman Bethune C.I.	Scarborough, ON
	LI	Chinese Int'l School	<u> </u>
IRENE J			Braemar Hill, Hong Kong
OLIVER	LI	Bayview S.S.	Richmond Hill, ON

/		~	
Name/Nom		School/École	Location/Endroit
REBECCA	LI	New Westminster S.S.	New Westminster, BC
TONY	LI	St. George's School	Vancouver, BC
VICTOR	LI	St. John's-Ravenscourt School	Winnipeg, MB
XINGLIN	LI	Bayview S.S.	Richmond Hill, ON
JEFFREY	LIANG	Martingrove C.I.	Etobicoke, ON
BAILEY	LIAO	Half Hollow Hills Central Schools	Dix Hills, NY
JENNY	LIAO	Elboya Jr. H.S.	Calgary, AB
LABAN	LIN	Fraser Heights S.S.	Surrey, BC
DAHENG LEO	LIU	Forest Hill C.I.	Toronto, ON
FRANK	LIU	Don Mills C.I.	North York, ON
JAMES	LIU	Riverside S.S.	Port Coquitlam, BC
QINGFAN	LIU	London Central S.S.	London, ON
ZHENGLIU	LIU	University of Toronto Schools	Toronto, ON
GARY	LUO	ICAE	Troy, MI
PAI	LUO	Sentinel S.S.	West Vancouver, BC
ALAN	MADSE N	Southridge School	Surrey, BC
KATIE	MARTIN	Earl Haig S.S.	North York, ON
DHRUV	MEDARAMETLA	ICAE	Troy, MI
SIMON	MIAO	Moscrop S.S.	Burnaby, BC
CLARE	MOFFATT	Branksome Hall	Toronto, ON
YOUCEF	MOKRANI	E.S. Mont-Royal	Mont-Royal, QC
WINNIE	MUI	David Thompson S.S.	Vancouver, BC
YUWADI	NAING	Jerudong Int'l School	Negara, Brunei Darussalam
TANAZ	NATERWALA	ICAE	Troy, MI
NATALIE	NGO	University of Toronto Schools	Toronto, ON
		· ·	
HENRY	NGUYEN	Dr. Gordon Higgins Jr. H.S.	Calgary, AB
CLARON	NIU	Chinese Int'l School	Braemar Hill, Hong Kong
SU JEE	NOH	Port Moody Sr. S.S.	Port Moody, BC
ALICE	NUZ	Vaughan S.S.	Thornhill, ON
JI WON	OH	Chinese Int'l School	Braemar Hill, Hong Kong
KATHERINE	OH		Bayside, NY
TONY	OH	U.W.C. South East Asia	Singapore
ANIL	PALEPU	ICAE	Troy, MI
DAVID	PAN	Milton D.H.S.	Milton, ON
ERIC	PAN	London Central S.S.	London, ON
MICHAEL	PANG	Acadia Jr. H.S.	Winnipeg, MB
CHANWOO	PARK	Leo Hayes H.S.	Fredericton, NB
DANNY	PARK	London Central S.S.	London, ON
JUNG IN	PARK	Meadowridge School	Maple Ridge, BC
JUSTIN	PARK	Port Moody Sr. S.S.	Port Moody, BC
JOSHEN	PATEL	ICAE	Troy, MI
CHANDLER	PICHE	Gravelbourg H.S.	Gravelbourg, SK
JONATHAN	PRADIPTA		Tangerang, Indonesia
JIN	QI	College Jean Eudes	Montreal, QC
CINDY	QIAN	Grandview Heights Elementary Jr. H.S.	Edmonton, AB
BEN	$\operatorname{QIU}$	Pickering College	Newmarket, ON
RAJ	RAINA	ICAE	Troy, MI
ATHAARIQ	RAMADINO		Tangerang, Indonesia
ALAN	REMPEL	Westgate Mennonite C.I.	Winnipeg, MB
JIESI	REN	Longfields-Davidson Heights S.S	Nepean, ON
REINE	REYNOSO	Math Trainers Guild of Philippines	Zamboanga City, Philippines
LUKEH	RIVETT	Sir Oliver Mowat C.I.	Scarborough, ON
JAMIE	ROSE	Crescent School	North York, ON
DESI	ROWAN	Parkside H.S.	Dundas, ON
JANAHAN	SELVANAYAGAM	General Vanier I.S.	Cornwall, ON
	SHEN		Burnaby, BC
JACQUELINE	SHEIN	Burnaby South S.S.	Durnaby, DC

nt /nt		C 1 1/ <del>5</del> 1	T /E 1
Name/Nom	CIII	School/École	Location/Endroit
KRISTEN	SHI	Queen Elizabeth H.S.	Calgary, AB
JAY	SHIM	Walnut Grove S.S.	Langley, BC
APURVA	SHRIVASTAVA	ICAE	Troy, MI
GAJAMEE	SIVAPATHAM	Marc Garneau C.I.	North York, ON
MARK	SOH	Queen Elizabeth H.S.	Calgary, AB
SAMUEL	SONG		Bayside, NY
ALYSSA	STEWART	Forest Heights C.I.	Kitchener, ON
VERA	SUDAKOVA	David Thompson S.S.	Vancouver, BC
HUZAIFA	SULTAN	Tom Baines School	Calgary, AB
IVY	SUN	Earl Haig S.S.	North York, ON
PRIYA	SURESH	Moscrop S.S.	Burnaby, BC
JAMES	SURYA HERMAN		Tangerang, Indonesia
NICHOLAS	SUSANTO		Tangerang, Indonesia
KEEFE	TAN	Math Trainers Guild of Philippines	Zamboanga City, Philippines
MATTHEW	TAN	Math Trainers Guild of Philippines	Zamboanga City, Philippines
NELSON	TANG	Dr. Norman Bethune C.I.	Scarborough, ON
JESSICA	TAO	Bayview S.S.	Richmond Hill, ON
TA JIUN	TING	Burnaby Central S.S.	Burnaby, BC
PETER	TIRTOWIJOYO	_ 3	Tangerang, Indonesia
WILLIAM	TONG	International School of Macao	Macau, China
THOMAS	VAILLANCOURT-H	College Jean Eudes	Montreal, QC
JIMI	VYAS	The Abelard School	Toronto, ON
JEFFRE Y	WAN	ICAE	Troy, MI
ALAN	WANG	Henry Wise Wood Sr. H.S	Calgary, AB
ANDY	WANG	Tom Baines School	Calgary, AB Calgary, AB
BENJAMIN	WANG	Richmond Hill H.S.	Richmond Hill, ON
CHINCHIN	WANG	Bell H.S.	Nepean, ON
JERRY	WANG	Cawthra Park S.S.	Mississauga, ON
KEVIN	WANG	Grandview Heights Elementary Jr. H.S.	Edmonton, AB
KRISTY	WANG	Grandview Heights Elementary Jr. H.S.	Edmonton, AB
RITA	WANG	Moscrop S.S.	Burnaby, BC
BEN	WEI		North York, ON
CHRISTIAN	WEN	Marc Garneau C.I.	North York, ON
TIMOTHY	WILLARD	Timiskaming D.S.S.	New Liskeard, ON
KAITLIN	WONG	Grandview Heights Elementary Jr. H.S.	Edmonton, AB
SANDY	WONG	Vincent Massey S.S.	Windsor, ON
GLORIA	WU	University of Toronto Schools	Toronto, ON
LARRY	WU	ICAE	Troy, MI
WENJIA	WU	Centennial Regional H.S.	Greenfield Park, QC
YANXIU	WU	Marc Garneau C.I.	North York, ON
YIDI LILY	WU	Vincent Massey S.S.	Windsor, ON
LOUISE	XIA	University of Toronto Schools	Toronto, ON
TIM	XIA	Queen Elizabeth H.S.	Calgary, AB
ALAN	XU	ICAE	Troy, MI
BRIAN	XU	ICAE	Troy, MI
DELLA	XU	West Vancouver S.S.	West Vancouver, BC
JUDY	XU	Branksome Hall	Toronto, ON
ROBBIN	XU	Lisgar C.I.	Ottawa, ON
STEPHEN	XU	Bell H.S.	Nepean, ON
YUWEI	XU	Vincent Massey S.S.	Windsor, ON
HUIYI	YANG	Dr. Norman Bethune C.I.	Scarborough, ON
MICHAEL	YANG	Dr. Norman Bethune C.I.	Scarborough, ON
BRIAN	YEUNG	Bayview S.S.	Richmond Hill, ON
METIN CAN	YIGIT	Tarsus American School	Tarsus, Turkey
CHARLES	YOU	West Vancouver S.S.	West Vancouver, BC
RYAN	YOUNG	Markham District H.S.	Markham, ON
TOTATA	LOUNG	MIGHTHER PROBLEM II.D.	warmani, ON

Name/Nom		${f School/\acute{E}cole}$	Location/Endroit
JACKY	YU	Fudan Int'l School	Shanghai, China
ULAS	ZEYREK	Tarsus American School	Tarsus, Turkey
$\operatorname{AL}$	ZHANG	Mount Royal Jr. H.S.	Calgary, AB
COCO	ZHANG	Branksome Hall	Toronto, ON
DEVIN	ZHANG	ICAE	Troy, MI
GAVIN	ZHANG	Sir Winston Churchill S.S.	Vancouver, BC
LILY	ZHANG	Moscrop S.S.	Burnaby, BC
RAN	ZHANG	Chinese Int'l School	Braemar Hill, Hong Kong
BETTY	ZHAO	Metropolitan Prepatory Academy	North York, ON
FREDDIE	ZHAO	ICAE	Troy, MI
WHITNEY	ZHENG	Woodbine Jr. H.S.	North York, ON
JOHN	ZHOU	University of Toronto Schools	Toronto, ON
YEXINHAO	ZHOU	Marc Garneau C.I.	North York, ON
FRANK	ZHU		Vancouver, BC
JAMESON	ZHU	Windermere S.S.	Vancouver, BC

The top 25% of the competitors in each of the three Contests were divided into three categories: Gold Standard, Silver Standard and Bronze Standard, in the ratio 1:2:3. The names of the those students achieving the Gold Standard (that is, scoring in roughly the top 4%) are listed alphabetically below for each Contest.

Les candidats qui se classent dans le premier quart de classement dans chacun des trois concours ont été répartis en trois catégories: le niveau or, le niveau argent et le niveau bronze, selon le ratio 1 : 2 : 3. Le nom des étudiants qui ont obtenu le niveau or (c'est-à-dire ceux qui se classent parmi les premiers 4 p. 100) est donné par ordre alphatbétique ci-dessous pour chaque concours.

Name/Nom		School/École	Location/Endroit
SEHEE	AHN	Lord Byng S.S.	Vancouver, BC
HAN	BAO	Zhenhai H.S. of Zhejiang	Ningbo, China
ROHIT	BHADANGE	ICAE	Troy, MI
LETIAN	CHEN	Vincent Massey S.S.	Windsor, ON
MARIA	CHEN	Moscrop S.S.	Burnaby, BC
RICHARD	CHEN	Gleneagle S.S.	Coquitlam, BC
SELINA	CHEN	Agincourt C.I.	Scarborough, ON
SHENG	CHEN	Wuxi No. 1 H.S	Wuxi, China
YU	CHEN	Zhenhai H.S. of Zhejiang	Ningbo, China
GEORGE	CHENG	University of Toronto Schools	Toronto, ON
KWAN LOK	CHENG	Munsang College	Kowloon City, Hong Kong
SOOMIN	CHEON	Bayview S.S.	Richmond Hill, ON
LEMUEL	CHIK	Marc Garneau C.I.	North York, ON
JENNA	CHOO	Lord Byng S.S.	Vancouver, BC
SID	CHOU		
MAHIMNA	DAVE	King's-Edgehill School Marc Garneau C.I.	Windsor, NS
MARTIN	DENG	Marc Garneau C.I. Marc Garneau C.I.	North York, ON
			North York, ON
DUODUO	DING	Wuxi No. 1 H.S Marc Garneau C.I.	Wuxi, China
SALLY	DONG		North York, ON
YILIN	DU	Wuxi No. 1 H.S	Wuxi, China
JUNRAN	DUAN DVSON TAM	Sir John A. Macdonald C.I.	Scarborough, ON
DAVAD	DYSON TAM	Danforth C.T.I.	Toronto, ON
ERXUAN	FAN	Shanghai Guanghua College	Shanghai, China
DAISY	FANG	Dalian Maple Leaf Int'l School	Dalian, China
DI	FANG	Shenzhen College of Int'l Education	Shenzhen, China
ARMIN	FARAHVASH	Jarvis C.I.	Toronto, ON
YUHAN	FENG	Wuxi No. 1 H.S	Wuxi, China
YI	GAO	Zhenhai H.S. of Zhejiang	Ningbo, China
GE DAILEY	GE	Zhenhai H.S. of Zhejiang	Ningbo, China
BAILEY	GU	Lisgar C.I.	Ottawa, ON
WEIQI	GU	Zhenhai H.S. of Zhejiang	Ningbo, China
MARY	HAMILTON	All Saints C.S.S.	Whitby, ON
YETING	HEV	Zhenhai H.S. of Zhejiang	Ningbo, China
YU CHUAN	HSU	Pinetree S.S.	Coquitlam, BC
LU	HUA	Zhenhai H.S. of Zhejiang	Ningbo, China
QIQING	HUANG	I 1D 00	North York, ON
RUOXIN	HUANG	Lord Byng S.S.	Vancouver, BC
SONIA	HUANG	Earl Haig S.S.	North York, ON
TIGER	HUANG	Upper Can College	Toronto, ON
ZILING	HUANG	Zhenhai H.S. of Zhejiang	Ningbo, China
HIRSH	JAIN	ICAE	Troy, MI
ALYF	JANMOHAMED	Upper Can College	Toronto, ON
MA	JESSIE	Richmond Hill H.S.	Richmond Hill, ON
WANLIN	JIANG	Western Canada H.S.	Calgary, AB
YANHUI	JIANGI	Wuxi No. 1 H.S	Wuxi, China
YAN	JIE	Zhenhai H.S. of Zhejiang	Ningbo, China
TIAN	JIN	Wuxi No. 1 H.S	Wuxi, China

DT /DT			T (* /D ) */
Name/Nom	IIN	School/École	Location/Endroit
YING	JIN	Zhenhai H.S. of Zhejiang	Ningbo, China
MASA	JUGOVIC	Marc Garneau C.I.	North York, ON
CONNIE	KANG	Chinese Int'l School	Braemar Hill, Hong Kong
KAAN CEM	KETENCI	Uskudar American Academy	Istanbul, Turkey
SEUNGKYEUM	KIM	Westside Preparatory School	Vancouver, BC
JANET	KIM	Richmond Hill H.S.	Richmond Hill, ON
JIHYUN	KIM	R.E. Mountain S.S.	Langley, BC
KUN	KIM	St. George's School	Vancouver, BC
JAE RYOUNG	KOO	U.W.C. South East Asia	Singapore
HYOUNGJUN	KWEON	Halifax West H.S.	Halifax, NS
CHI TAT	LAM	Munsang College	Kowloon City, Hong Kong
FREDRIC	LAM	Centennial Regional H.S.	Greenfield Park, QC
JACQUELINE	LAW	Crofton House School	Vancouver, BC
LOUIE NICH	LEE	Int'l School Manila	Taguig City, Philippines
SHUK HING	LEUNG	Munsang College	Kowloon City, Hong Kong
TSUN SUN	LEUNG	Munsang College	Kowloon City, Hong Kong
JAMIE	LI	St. Michael's Univ. School	Victoria, BC
JIMING	LI	St. George's School	Vancouver, BC
THOMAS	LI	Chinese Int'l School	Braemar Hill, Hong Kong
WUYI	LI	Zhenhai H.S. of Zhejiang	Ningbo, China
YIQIAO	LI	Lord Byng S.S.	Vancouver, BC
ZIYAN	LI	Lord Byng S.S.	Vancouver, BC
WEI TING	LIN	Cobequid Education Centre	Truro, NS
YAO	LIN	Beijing Concord College of Sino-Canada	Beijing, China
BRYAN	LIU	Waterloo C.I.	Waterloo, ON
MINXIN	LIU	Wuxi No. 1 H.S	Wuxi, China
SHAWN	LIU	Vincent Massey S.S.	Windsor, ON
SIYUAN	LIU	Earl Haig S.S.	North York, ON
YIJUN THOMAS	LIU LU	Wuxi No. 1 H.S Markham District H.S.	Wuxi, China Markham, ON
YUANSHEN	LU	Zhenhai H.S. of Zhejiang	Markham, ON Ningbo, China
YUCHUN	LU	Wuxi No. 1 H.S	Wuxi, China
YUE	LU	Wuxi No. 1 H.S Wuxi No. 1 H.S	Wuxi, China
YUFAN	LU	E.S. St. Luc	Montreal, QC
ZHENYU	LU	Shanghai Guanghua College	Shanghai, China
SIU HANG	LUI	Munsang College	Kowloon City, Hong Kong
ZHAOYI	LUO	Zhenhai H.S. of Zhejiang	Ningbo, China
YUFENG	MAO	Zhenhai H.S. of Zhejiang Zhenhai H.S. of Zhejiang	Ningbo, China
YIDONG	MIAO	Zhenhai H.S. of Zhejiang Zhenhai H.S. of Zhejiang	Ningbo, China
HEEJOO	NAM	Western Canada H.S.	Calgary, AB
DANA	NG	Canadian Int'l High School	Singapore
RUIQING	NI	Zhenhai H.S. of Zhejiang	Ningbo, China
XIAO	NIU	E.S. St. Luc	Montreal, QC
BARAK	OSHRI	U.W.C. South East Asia	Singapore
YUWEI	PAN	Shenzhen College of Int'l Education	Shenzhen, China
MICHAEL	PARK	Leo Hayes H.S.	Fredericton, NB
MINSEO	PARK	North Toronto C.I.	Toronto, ON
SEOYEON	PARK	Int'l School Manila	Taguig City, Philippines
RAGHAV	PRABHU	ICAE	Troy, MI
YI	QIAN	Zhenhai H.S. of Zhejiang	Ningbo, China
BOBBY	QIU	Don Mills C.I.	North York, ON
BRYAN	QIU	Richmond Hill H.S.	Richmond Hill, ON
KEVIN	REN	Pickering H.S.	Ajax, ON
VASU	SAREEN	~	London, ON
ADRIAN	SHE	David Thompson S.S.	Vancouver, BC
JENNY	SHENG	Earl of March S.S.	Kanata, ON

Name/Nom		$School/\acute{\mathbf{E}}cole$	Location/Endroit
FEIFAN	SHI	Zhenhai H.S. of Zhejiang	Ningbo, China
WU	SHUYUAN	Zhenhai H.S. of Zhejiang Zhenhai H.S. of Zhejiang	Ningbo, China
LARRY	SO	Chinese Int'l School	Braemar Hill, Hong Kong
ALLAN	SONG		North York, ON
RUI	SONG	Walter Murray C.I.	Saskatoon, SK
DANIEL	SPIVAK	Bayview S.S.	Richmond Hill, ON
LINGFEI	SUN	Shanghai Guanghua College	Shanghai, China
HELEN	TANG	Marc Garneau C.I.	North York, ON
MU	TANG	Lord Byng S.S.	Vancouver, BC
STERLING	TIU	Math Trainers Guild of Philippines	Zamboanga City, Philippines
EDWARD	TSAI	Vincent Massey S.S.	Windsor, ON
JAMES	$\mathrm{TU}$	v	North York, ON
KAA	UGURLU	Tevitol H.S.	Gebze, Turkey
SEYFIHAN	USARER	Uskudar American Academy	Istanbul, Turkey
MIKAELA	UY	Math Trainers Guild of Philippines	Zamboanga City, Philippines
MICHAEL	VU	Mother Teresa C.S.S.	London, ON
CHRIS	WAN	Chinese Int'l School	Braemar Hill, Hong Kong
ALICK	WANG	Bell H.S.	Nepean, ON
ALLEN	WANG	Bayview S.S.	Richmond Hill, ON
BOBBY	WANG	West Vancouver S.S.	West Vancouver, BC
JIANAN	WANG	Vincent Massey S.S.	Windsor, ON
SHINE	WANG	Bayview S.S.	Richmond Hill, ON
SUNNY	WANG	Bell H.S.	Nepean, ON
YUANHAO	WEI	Earl of March S.S.	Kanata, ON
ZHIX IN	WEN	Wuxi No. 1 H.S	Wuxi, China
TSZ YING	WONG	Shenzhen College of Int'l Education	Shenzhen, China
GAVIN	WU	Sir Winston Churchill S.S.	Vancouver, BC
KEVIN	WU		North York, ON
MINXIA	WU	Zhenhai H.S. of Zhejiang	Ningbo, China
SHUYI	WU	Fort Richmond C.I.	Winnipeg, MB
TONY	WU	Dr. Norman Bethune C.I.	Scarborough, ON
ZHENHUA YUCHEN	WU XIA	Shanghai Guanghua College	Shanghai, China
SALLY CHEN	XIE	Earl Haig S.S. Vincent Massey S.S.	North York, ON Windsor, ON
YUKUAN	XIE	Don Mills C.I.	North York, ON
DENNIS	XU	Abbey Park H.S.	Oakville, ON
JOEL	XU	Markham District H.S.	Markham, ON
QINYI	XU	Wuxi No. 1 H.S	Wuxi, China
SHIKAI	YAN	Zhenhai H.S. of Zhejiang	Ningbo, China
BOB	YANG	Sir Winston Churchill S.S.	Vancouver, BC
BYRON	YANG	Moscrop S.S.	Burnaby, BC
JINGBO	YANG	John Fraser S.S.	Mississauga, ON
JINGQI	YANG	Wuxi No. 1 H.S	Wuxi, China
SHIRLEY	YANG	Sir John A. Macdonald C.I.	Scarborough, ON
SIQI	YANG	Pinetree S.S.	Coquitlam, BC
YUQING	YANG	Wuxi No. 1 H.S	Wuxi, China
YUAN	YAO	Colonel By S.S.	Gloucester, ON
CELINE	YIN	Sir Winston Churchill S.S.	Vancouver, BC
ALLEN	YU	Marc Garneau C.I.	North York, ON
YIK HEI	YU	Munsang College	Kowloon City, Hong Kong
REENA	ZHAN	University of Toronto Schools	Toronto, ON
BEIYI	ZHANG	Wuxi No. 1 H.S	Wuxi, China
JASON	ZHANG	Vincent Massey S.S.	Windsor, ON
$_{ m JIE}$	ZHANG	Wuxi No. 1 H.S	Wuxi, China
JUNCHEN	ZHANG	Gleneagle S.S.	Coquitlam, BC
WEIWEIBING	ZHANG	Vincent Massey S.S.	Windsor, ON

Name/Nom		School/École	Location/Endroit
XIAO	ZHANG	Shenzhen College of Int'l Education	Shenzhen, China
YINUO	ZHANG	Zhenhai H.S. of Zhejiang	Ningbo, China
ENFENG	ZHOU	Zhenhai H.S. of Zhejiang	Ningbo, China
FUMING	ZHOU	Shenzhen College of Int'l Education	Shenzhen, China
JOSEPH	ZHOU	Vincent Massey S.S.	Windsor, ON
MUCHEN	ZHOU	Zhenhai H.S. of Zhejiang	Ningbo, China
WEICHEN	ZHOU	Zhenhai H.S. of Zhejiang	Ningbo, China
WILLIAM	ZHOU	Britannia S.S.	Vancouver, BC
XINQI	ZHOU	Zhenhai H.S. of Zhejiang	Ningbo, China
NICK	ZHU	Dr. Norman Bethune C.I.	Scarborough, ON
QIFAN	ZHU	Shenzhen College of Int'l Education	Shenzhen, China
ROBERT	ZHU	Iroquois Ridge H.S.	Oakville, ON
WEIEYU	ZHU	Northern S.S.	Toronto, ON
YANSHEN	ZHU	Shenzhen College of Int'l Education	Shenzhen, China
JIALEI	ZHUO	Zhenhai H.S. of Zhejiang	Ningbo, China

The top 25% of the competitors in each of the three Contests were divided into three categories: Gold Standard, Silver Standard and Bronze Standard, in the ratio 1:2:3. The names of the those students achieving the Gold Standard (that is, scoring in roughly the top 4%) are listed alphabetically below for each Contest.

Les candidats qui se classent dans le premier quart de classement dans chacun des trois concours ont été répartis en trois catégories: le niveau or, le niveau argent et le niveau bronze, selon le ratio 1 : 2 : 3. Le nom des étudiants qui ont obtenu le niveau or (c'est-à-dire ceux qui se classent parmi les premiers 4 p. 100) est donné par ordre alphatbétique ci-dessous pour chaque concours.

Name/Nom		School/École	Location/Endroit
AIDAN	ACQUAH	SOS-Hermann Gmeiner Int'l College	Tema, Ghana
SUNGIL	AHN	Abbotsford M.S.	Abbotsford, BC
MIKEL	ALLAS	Math Trainers Guild of Philippines	Zamboanga City, Philippines
SHIRI	ALMOG	Stephen Lewis S.S.	Thornhill, ON
SEUNGJIN	AN	St. Andrew's College	Aurora, ON
RIGYA	ARYA	Academie Ste. Cecile Int'l	Windsor, ON
HARRY	BANG		Windsor, ON
		Vincent Massey S.S.	
ARSHIA	BEIGI	West Vancouver S.S.	West Vancouver, BC
ISABELLA	BERSANI	Chinese Int'l School	Braemar Hill, Hong Kong
ANTON	BORISSOV	Waterloo C.I.	Waterloo, ON
ADRIAN	BRAM	II	Tangerang, Indonesia
MATTHEW	BRENNAN	Upper Can College	Toronto, ON
MATTHEW	BRIGDAN	Queen Elizabeth H.S.	Calgary, AB
JAYSON	CAMARGO	Holy Trinity C.S.S.	Oakville, ON
HAZAL	CAN	Tevitol H.S.	Gebze, Turkey
RUN ZE	CAO	Martingrove C.I.	Etobicoke, ON
YIQI	CAO	Bayview S.S.	Richmond Hill, ON
KEVIN	CARRUTHERS	St. John's-Ravenscourt School	Winnipeg, MB
MICHAEL	CHAN	Thornhill S.S.	Thornhill, ON
LAURA	CHANDLER	River East C.I.	Winnipeg, MB
SUAHN	CHANG	Holy Cross Regional H.S.	Surrey, BC
BENJAMIN	CHASNOV	Chinese Int'l School	Braemar Hill, Hong Kong
EDREA	CHEN	Sir Winston Churchill S.S.	Vancouver, BC
GREN	CHEN	Thornhill S.S.	Thornhill, ON
JANE	CHEN	Holy Trinity School	Richmond Hill, ON
YANG	CHEN	Fuyuan School	Shenzhen, China
CHARLIE	CHENG	Western Canada H.S.	Calgary, AB
SEAN	CHENG	Math Trainers Guild of Philippines	Zamboanga City, Philippines
LESLIE	CHI	Seaquam S.S.	Delta, BC
LEONARD	CHIU	Crescent School	North York, ON
PANG CHIEH	CHIU	St. George's School	Vancouver, BC
RAYMOND	СНО	West Vancouver S.S.	West Vancouver, BC
LOK	CHOI	Markham District H.S.	Markham, ON
MARK	CHOI	St. Andrew's College	Aurora, ON
ANTHONY	CHUNG	St. John's-Ravenscourt School	Winnipeg, MB
TUDOR	CIRSTEA	Bayview S.S.	Richmond Hill, ON
DAVID	COHNN	The Country Day School	King City, ON
XIANGLEI	CUI	Beijing Concord College of Sino-Canada	Beijing, China
WENJUN	DAI	Wuxi No. 1 H.S	Wuxi, China
TUDOR	DATCU	Crescent School	North York, ON
XIAOYU	DENG	Unionville H.S.	Markham, ON
ANQI	DONG	Walter Murray C.I.	Saskatoon, SK
•		waiter Murray C.1.	
RICHARD	DU	E C C+ I	North York, ON
SHI YAN	DU	E.S. St. Luc	Montreal, QC
XIAOHAN	DU	Vaughan Road Academy	York, ON
CHEN	FAN	Western Canada H.S.	Calgary, AB
JIAYAO	FAN	E.S. St. Luc	Montreal, QC

Name/Nom		School/École	Location/Endroit
KAREN	FENG	Vincent Massey S.S.	Windsor, ON
YUANCHEN	FENG	Western Canada H.S.	Calgary, AB
TAL	FRIEDMAN	Thornhill S.S.	Thornhill, ON
ALEXANDER	FUNG	University of Toronto Schools	Toronto, ON
EDDY	GAO	Lisgar C.I.	Ottawa, ON
JACKSON	GAO	Glenlyon-Norfolk Sr. S.S.	Victoria, BC
ALEX	GATEA	Waterloo C.I.	Waterloo, ON
ARIK	GERSHON	William Lyon Mackenzie C.I.	North York, ON
AMPAUL	GILL	Seaquam S.S.	Delta, BC
HARRY	GO	R.E. Mountain S.S.	Langley, BC
YAAKOV	GREEN	Bnei Akiva School	North York, ON
TIANCHANG	GU	Zhenhai H.S. of Zhejiang	Ningbo, China
YUN JIA	GUAN	University of Toronto Schools	Toronto, ON
LINGQING	GUO	University of Toronto Schools	Toronto, ON
JIN	HAN	Earl Haig S.S.	North York, ON
SEUNG WOO	HONG	Mississauga Private School	Etobicoke, ON
JEFF	HSU	Claremont S.S.	Victoria, BC
KATIE	ING	The Woodlands School	
			Mississauga, ON
LARIESA	JANECKA	Sir John A. Macdonald S.S.	Waterloo, ON
JIHYUK	JEONG	Halifax West H.S.	Halifax, NS
KEVIN	JIA	University of Toronto Schools	Toronto, ON
TED	JIA	Don Mills C.I.	North York, ON
YIZUO	JIN	Wuxi No. 1 H.S	Wuxi, China
STEPHEN	JUNG	Marc Garneau C.I.	North York, ON
CEM	KALKANLI	Tevitol H.S.	Gebze, Turkey
JAE WON	KIM	Southridge School	Surrey, BC
YUNJAE	KIM	Lisgar C.I.	Ottawa, ON
NATHAN	KONG	Upper Can College	Toronto, ON
JETHRO	KWONG	Crescent School	North York, ON
THOMAS	LAMOTHE	St. John's-Ravenscourt School	Winnipeg, MB
GILLIAN	LEE	University of Toronto Schools	Toronto, ON
RACHEL	LEE	Chinese Int'l School	Braemar Hill, Hong Kong
SEUNGWON	LEE	Southridge School	Surrey, BC
WOOJUNG	LEE	St. Michael's Univ. School	Victoria, BC
ANDREW	LEUNG	Crescent School	North York, ON
MARTIN	LEUNG	Marc Garneau C.I.	North York, ON
HUIREN	LI	Wuxi No. 1 H.S	Wuxi, China
JIANXIA	LI	Vaughan S.S.	Thornhill, ON
JIASHU	LI	West Vancouver S.S.	West Vancouver, BC
JING YAO	LI	Bayview S.S.	Richmond Hill, ON
SALLY	LI	Marc Garneau C.I.	North York, ON
SIMON ANG	LI	Glenforest S.S.	Mississauga, ON
TERESA	LI	Western Canada H.S.	Calgary, AB
MEGAN	LIANG	Western Canada H.S.	Calgary, AB
BORIS	LIN	Elgin Park S.S.	Surrey, BC
CHARLES	LIN	St. David C.S.S.	Waterloo, ON
JAMES	LIN	Western Canada H.S.	Calgary, AB
CHEN	LIU	Zhenhai H.S. of Zhejiang	Ningbo, China
DENNIS	LIU		North York, ON
DORIS YANG	LIU	David Thompson S.S.	Vancouver, BC
HELENA	LIU	Monarch Park C.I.	Toronto, ON
JACKIE	LIU	Sir Winston Churchill S.S.	Vancouver, BC
JERRY	LIU	Waterloo C.I.	Waterloo, ON
QINGYUAN	LIU	Wuxi No. 1 H.S	Wuxi, China
Ϋ́Ι	LIU	York Mills C.I.	North York, ON
YUE	LIU	Fort Richmond C.I.	Winnipeg, MB
			<b>.</b> 5/

Name/Nom		School/École	Location/Endroit
ZIYUÉ	LIU	Hants East Rural H.S.	Milford Station, NS
DAVID	LU	ICAE	Troy, MI
SEAN XIAON	LU	Vincent Massey S.S.	Windsor, ON
XI NI	LUO	Shenzhen College of Int'l Education	Shenzhen, China
JASON	LYNCH	Bishop Carroll H.S.	Calgary, AB
KATHRYN	LYNCH	Miramichi Valley H.S.	Miramichi, NB
ANGELA	MA	University of Toronto Schools	Toronto, ON
JONATHAN	MAK	The Woodlands School	Mississauga, ON
CHANUKYA	MALLA	ICAE	Troy, MI
AIDAN	MCKAY	Centennial C.V.I.	Guelph, ON
WONG	MICHAEL	Harbord C.I.	Toronto, ON
CHRISTOPHER	MITCHELTREE	Halifax West H.S.	Halifax, NS
DANIEL	NG	Chinese Int'l School	Braemar Hill, Hong Kong
ALBERT	NGUYEN	Seaquam S.S.	Delta, BC
SIJIA	NIU	Branksome Hall	Toronto, ON
ADAM	NOBLE MARKS	Crescent School	North York, ON
JONATHAN	ONG	The Woodlands School	Mississauga, ON
KARANBIR	PAHIL	Sydney Academy	Sydney, NS
TAE HYOUN	PARK	Holy Cross Regional H.S.	Surrey, BC
KENJI	PLISZKA	St. John's-Ravenscourt School	Winnipeg, MB
VIKRAM	PRASAD	ICAE	Troy, MI
TERRY	PYUN	Richmond Hill H.S.	Richmond Hill, ON
YINGJIE	QIAN	Bulkley Valley Christian School	Smithers, BC
HUNTER	QIAN	Vincent Massey S.S.	Windsor, ON
HAO	REN	Wuxi No. 1 H.S	
JULIAN	SALAZAR		Wuxi, China Calgary, AB
		Henry Wise Wood Sr. H.S Strathcona H.S.	Edmonton, AB
MARIYA	SARDARLI SENTHIVASAN	Marc Garneau C.I.	*
SHREERAM		Markham District H.S.	North York, ON
EVAN DESMOND	SHEN SISSON		Markham, ON
KEVIN	SIU	Queen Elizabeth H.S.	Calgary, AB
		Agincourt C.I. Western Canada H.S.	Scarborough, ON
ANAMJIT	SIVIA		Calgary, AB
JONATHAN	SMITH	Sydney Academy	Sydney, NS
ALEX	SONG	ICAE	Troy, MI
GEOFFRY	SONG	Lisgar C.I.	Ottawa, ON
JOE NICOLAC	SU	Lisgar C.I.	Ottawa, ON
NICOLAS	SUAREZ	Cawthra Park S.S.	Mississauga, ON
ALVIN Y	SUKMADJI	Earl Haig S.S.	North York, ON
JEFF	SUN	St. Robert C.H.S.	Thornhill, ON
LINKE	SUN	Zhenhai H.S. of Zhejiang	Ningbo, China
ROSE	SUN	Western Canada H.S.	Calgary, AB
XIAOLEI	SUN	Jarvis C.I.	Toronto, ON
YISHI	SUN	White Oaks S.S.	Oakville, ON
SHUNDA	SUO	Malaria Call (Dia)	North York, ON
JULIUS	SY	Math Trainers Guild of Philippines	Zamboanga City, Philippines
JANELLE	TAM	Waterloo C.I.	Waterloo, ON
MANDY	TAM	Burnaby South S.S.	Burnaby, BC
DAVID	TANG	Western Canada H.S.	Calgary, AB
JOHNNY	TANG	Markham District H.S.	Markham, ON
SAMUEL	TANG	Western Canada H.S.	Calgary, AB
MOHAMED	TAREK ABDELATY	Manarat Al Riyadh Int'l School	Riyadh, Saudi Arabia
LISE	TURNER	E.S. Dorval Jean XXIII	Dorval, QC
TAARON	VAINIO	Sir Winston Churchill C.V.I.	Thunder Bay, ON
MONICA	VANYA SANTOSO	D	Tangerang, Indonesia
EMILIO	VERDUGO PAREDE	Resurrection C.S.S.	Kitchener, ON
PEIYAO	WAN	North Toronto C.I.	Toronto, ON

Name/Nom		School/École	Location/Endroit
CODY	WANG	Western Canada H.S.	Calgary, AB
JOHNNY	WANG	Pinetree S.S.	Coquitlam, BC
JUSTIN	WANG	University of Toronto Schools	Toronto, ON
KEQI	WANG	Marc Garneau C.I.	North York, ON
OSCAR	WANG	Chinese Int'l School	Braemar Hill, Hong Kong
ROBERT	WANG	Sir Winston Churchill S.S.	Vancouver, BC
RUOXI	WANG	Wuxi No. 1 H.S	Wuxi, China
TIANYU	WANG	E.S. St. Luc	Montreal, QC
YE TING	WANG	York Mills C.I.	North York, ON
YI HENG	WANG	Port Moody Sr. S.S.	Port Moody, BC
YU	WANG	E.S. St. Luc	Montreal, QC
ZIHAO	WANG	Lord Byng S.S.	Vancouver, BC
SEAN	WEN	Marc Garneau C.I.	North York, ON
PATRI CK	WHITE	Crescent School	North York, ON
ERWIN	WIBOWO		Tangerang, Indonesia
ANNETTE	WONG	William Lyon Mackenzie C.I.	North York, ON
CAROLYN	WONG	Templeton S.S.	Vancouver, BC
MELISSA	WONG	St. John's-Ravenscourt School	Winnipeg, MB
MICHELLE	WONG	Marc Garneau C.I.	North York, ON
JAY YOUNG	WOO	London Central S.S.	London, ON
GONGHAO	WU	York Mills C.I.	North York, ON
MICHAEL	WU	St. John's-Ravenscourt School	Winnipeg, MB
SHIYAO	WU	Wuxi No. 1 H.S	Wuxi, China
YUHUAI	WU	Fredericton H.S.	Fredericton, NB
KEYING	XIANG	Wuxi No. 1 H.S	Wuxi, China
SHIQI	XIAO	Albert Campbell C.I.	Scarborough, ON
MENGDI	XING	Beijing Concord College of Sino-Canada	Beijing, China
CHENGCHENG	XU	York Mills C.I.	North York, ON
DAVID	XU	Richmond Hill H.S.	Richmond Hill, ON
PETER	YANG	Bayview S.S.	Richmond Hill, ON
ZACHARY	YANG	Don Mills C.I.	North York, ON
ALLEN	YIEH	Seaquam S.S.	Delta, BC
LI	YIN	William Lyon Mackenzie C.I.	North York, ON
ELISHA	YU	Moscrop S.S.	Burnaby, BC
MICHAEL	YU	Bell H.S.	Nepean, ON
STEVEN	YU	Pinetree S.S.	Coquitlam, BC
LINDA YIHE	ZENG	Vincent Massey S.S.	Windsor, ON
YAN	ZENG	Southpointe Academy	Delta, BC
ERIC	ZHAN	University of Toronto Schools	Toronto, ON
CLARK	ZHANG	Upper Can College	Toronto, ON
JASON	ZHANG		North York, ON
JUNCHEN	ZHANG	Pierre Elliott Trudeau H.S.	Markham, ON
JUSTIN	ZHANG	Dr. Norman Bethune C.I.	Scarborough, ON
MAGGIE	ZHANG	Marc Garneau C.I.	North York, ON
QIHUI	ZHANG	Lord Byng S.S.	Vancouver, BC
JONATHAN	ZHAO		North York, ON
RUHUI	ZHAO	Wuxi No. 1 H.S	Wuxi, China
XIAOYING	ZHENG	Zhenhai H.S. of Zhejiang	Ningbo, China
KEVIN	ZHOU	Woburn C.I.	Scarborough, ON
WEI ZHENG	ZHOU	Lord Byng S.S.	Vancouver, BC
YANGYANG	ZHOU	Zhenhai H.S. of Zhejiang	Ningbo, China
YI CHEN	ZHOU	Thornhill S.S.	Thornhill, ON
JIA LIN	ZHU	Unionville H.S.	Markham, ON
MANDY	ZHU	Bayview S.S.	Richmond Hill, ON
JESSICA	ZUNG	University of Toronto Schools	Toronto, ON