



Concours canadien de mathématiques

An activity of The Centre for Education in Mathematics and Computing, University of Waterloo, Waterloo, Ontario Une activité du Centre d'éducation en mathématiques et en informatique, Université de Waterloo, Waterloo, Ontario

2004 Results

Gauss Contest

(Grades 7 & 8)

2004 Résultats

Concours Gauss

(7° et 8° années – Sec. I et II au Québec)

C.M.C. Sponsors: Avec la contribution de :



Deloitte & Touche

Chartered Accountants



C.M.C. Supporters: Avec la participation de :



Canadian Institute of Actuaries Institut canadien des actuaires

Great-West Life



Great West Life and London Life London Life, compagnie d'assurance-vie et La Great-West, compagnie d'assurance-vie



Sybase Inc. (Waterloo)

*i*Anywhere.

*i*Anywhere Solutions

Executive Committee / Comité exécutif Barry Ferguson, (Director / directeur),

Peter Crippin, Judith Koeller, Ian VanderBurgh

Computer Operation / Ordinatique Steve Breen, University of Waterloo / Université de Waterloo

Matthew Oliver, University of Waterloo / Université de Waterloo

Gauss Contest Report Compilers /

Lloyd Auckland, University of Waterloo / Université de Waterloo Barry Ferguson, University of Waterloo / Université de Waterloo Compilateurs du rapport du Concours Gauss

Joanne Kursikowski Kim Schnarr

Preparation of Materials / Documentation

Linda Schmidt, University of Waterloo / Université de Waterloo

Publications / Publications Linda Schmidt, University of Waterloo / Université de Waterloo

French Edition / Version française André Ladouceur, College Catholique Samuel-Genest, Ottawa

Gérard Proulx, Collège catholique Franco-Ouest, Ottawa

Technical Assistants / Adjoints à la technique Joanne Kursikowski, Angie Lapointe, Linda Schmidt, Kim Schnarr,

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), Woodstock

2004 Gauss Contest Committee

Comité Gauss 2004

Ed Barbeau University of Toronto Toronto, Ontario

Mark Bredin (Chair) St. John's-Ravenscourt School Winnipeg, Manitoba

Sandy Emms Jones

Forest Heights Collegiate Institute

Kitchener, Ontario

Kevin Grady

Cobden District Public School

Cobden, Ontario

Joanne Halpern Toronto, Ontario David Matthews University of Waterloo Waterloo, Ontario

John Grant McLoughlin University of New Brunswick Fredericton, New Brunswick

Jason Stanat

Roland Michener P.S. Ajax, Ontario

Gerald Stephenson St. Thomas More C.S.S. Hamilton, Ontario

Comments Commentaires



Barry A. Ferguson

The Gauss Contests are the first in a series of mathematics contests administered by the CMC for students in Canadian schools. In 2004, 203 000 students enrolled at all levels, with close to 85 000 enrolled in the Gauss Contests.

Mathematics contests, as designed by the Canadian Mathematics Competition, have several goals. The first, and by far the most important, is to provide an enrichment activity that complements the school curriculum and helps students develop their capability to solve challenging problems. Other goals include: providing an enjoyable extra-curricular activity for students and teachers, encouraging the pursuit of excellence, and awakening in students an awareness of their mathematical ability. We believe that students who prepare for and write mathematics contests will derive much enjoyment and satisfaction from successfully solving new and challenging problems. In addition, contests provide teachers with a library of problems suitable for classroom use.

Every year a few people ask about giving points for unanswered questions. The idea behind this is the following: a student making a legitimate attempt at the contest should be able to answer fifteen of the twenty-five questions. At the same time, they should recognize questions which they are unable to answer or even make an informed guess at the correct answer. Thus, up to ten times, the executive decided to award two points for not answering a question.

This report includes a summary of student performance on the 2004 Gauss Contests. We do not have statistics for all students since reporting results in voluntary, but the enclosed results represent almost 32 000 of the participants. The median scores were 88.95 in grade 7 and 88.54 in grade 8 this year. All participants are to be congratulated, and I hope that you continue to derive some enjoyment from participation in our contests.

Les concours Gauss sont les premiers d'une série de concours de mathématiques administrés dans les écoles canadiennes par le concours canadien de mathématiques. En 2004, des 203 000 étudiants inscrits aux différents cycles, près de 85 000 ont relevé le défi Gauss.

Les concours de mathématiques conçus par le concours canadien de mathématiques poursuivent plusieurs objectifs. Le premier, et de loin le plus important, consiste à présenter une activité d'enrichissement qui vient s'ajouter aux programmes d'études tout en permettant aux étudiants d'accroître leur habileté à résoudre des problèmes difficiles. Ces concours présentent aussi aux enseignants comme aux étudiants une activité parascolaire agréable, qui encourage la recherche de l'excellence et amène les étudiants à prendre conscience de leurs aptitudes en mathématiques. Nous considérons que les étudiants qui se préparent à ces concours et relèvent le défi retirent beaucoup de plaisir et une grande satisfaction à trouver la solution de problèmes nouveaux et stimulants. De plus, ces concours viennent enrichir les banques de problèmes des enseignants d'une moisson de nouveaux problèmes à présenter en classe.

Chaque année, quelques personnes demandent que l'on accorde des points pour les questions non répondues pour la raison suivante un étudiant qui se présente au concours devrait être capable de répondre à quinze des vingt-cinq questions. De plus, il devrait reconnaître les questions auxquelles il ne peut répondre ou même essayer de deviner la bonne réponse. Par conséquent, la direction a, jusqu'à dix fois, décidé d'accorder deux points aux questions non répondues.

Ce rapport comprend un résumé du rendement des étudiants aux concours Gauss□2004. Nous ne possédons pas les statistiques de tous les étudiants puisque la divulgation des résultats était sur une base volontaire, mais les résultats ci-joints représentent presque 32□000□des participants. La note moyenne est de 88,95 en 7°□année et de 88,54 en 8° année. Nous félicitons tous les participants et espérons que vous continuerez à apprécier nos concours.

Barry A. Ferguson Director

Barry A. Ferguson
Directeur

Enrolment Inscription

Student Enrolment by Province / Inscriptions Classées par Province

Newfoundland / Terre-Neuve	1701	Manitoba / Manitoba	1690
Nova Scotia / Nouvelle-Écosse	1422	Saskatchewan / Saskatchewan	434
New Brunswick / Nouveau-Brunswick	765	Alberta / Alberta	5383
P.E.I. / Ile du Prince-Édouard	160	British Columbia / Colombie-Britannique	14 099
Québec / Québec	8745		
Ontario / Ontario	47 876		

Total enrolment / Nombre d'inscriptions individuelles: 82 275

Statistics for Canada

Statistiques pour le Canada

Number of students represented / Nombre d'élèves: 31 295

Grade 7

Below

7^e année (Sec. I au Québec)

Number of schools represented / Nombre d'écoles – 762 Number of students represented / Nombre d'élèves – 15 537 Median / Médiane – 88.95

Marks Points	Number of Students Nombre d'élèves	Approximate Percentage of Students Pourcentage approximatif du nombre d'élèves
125 – 150	1392	8.14
100 - 124	3960	22.52
85 – 99	3606	19.61
70 - 84	2480	21.21
55 – 69	1125	17.03
40 - 54	1692	8.85
v 40 / au-dessous de 40	605	2.64

Grade 8 8e année (Sec. II au Québec)

Number of schools represented / Nombre d'écoles – 719

Number of students represented / Nombre d'élèves – 15 758

Median / Médiane – 88.54

Marks	Number of Students	Approximate Percentage of Students
Points	Nombre d'élèves	Pourcentage approximatif du nombre d'élèves
125 - 150	1433	3.93
100 - 124	4012	19.62
85 – 99	3491	21.07
70 - 84	2095	23.51
55 – 69	2415	19.21
40 - 54	1408	9.75
Below 40 / au-dessous de 40	904	2.91

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

Perfect Scores of 150

Name	Š cноог	Location	Prov
Nom	Ecole	Endroit	Prov
Shafqat Ahmed	Churchill Heights P.S.	Scarborough	ON
Jackie Au	Laurier School	Vancouver	BC
Aleksandra Baic	Hawthorne Public School	Ottawa	ON
Murphy Berzish	St. John's-Ravenscourt School	Winnipeg	MB
Zack Blair	St. Matthew	Waterloo	ON
Gauruv Bose	Hawthorne Public School	Ottawa	ON
Nathalie Boulanger	Collège Regina Assumption	Montreal	QC
Addison Chadwick	Beattie Elementary	Kamloops	BC
Galen Chan	Agnes Macphail PS	Scarborough	ON
Florence Chan	Cummer Valley Middle School	North York	ON
Dipayan Chaudhuri	Tomken Road Sr. P. S	Mississauga	ON
Mihai Chelaru	University of Toronto Schools	Toronto	ON
Kevin Chen	South Slope	Burnaby	ВС
Leo Chen	Torquay E. S.	Victoria	ВС
Holly Chen	Bothwell Elementary	Surrey	BC
Arnold Ho Cheung	Sir Ernest MacMillan Sr. P.S.	Scarborough	ON
Derrick Chow	St. Justin Martyr C.S.	Unionville	ON
Oscar Chow	Silver Stream P.S.	Richmond Hill	ON
Eric Chun	Henry Kelsey Sr. P.S.	Agincourt	ON
Joel Derksen	Mennonite Brethren Collegiate Institute	Winnipeg	MB
Harris Dexter	Eric Graves Memorial Jr. HS	Dartmouth	NS
Amarvir Dhaliwal	Churchill Heights P.S.	Scarborough	ON
Anton Dobrin	Dublin Heights EMS	Toronto	ON
Mack Duan	Calvin Park Challenge Program	Kingston	ON
Quinntin Fong	Windfields Junior High School	North York	ON
Henry Fung	Camilla Senior PS	Mississauga	ON
Adina Goldberg	Associated Hebrew Schools	Toronto	ON
Daniel Groot	Timothy Christian School	Rexdale	ON
Chengcheng Gui	Henry G. Izatt Middle School	Winnipeg	MB
Prateek Gupta	Alexander Graham Bell P.S.	Ajax	ON
John Han	St.Michael School	Oakville	ON
Scott Howard	Jack Miner P.S.	Whitby	ON
Jiun-Ruey Hu	Cummer Valley Middle School	North York	ON
Sameer Kalra	Crescent School	Willowdale	ON
JiHo Kim	Camilla Senior PS	Mississauga	ON
Maranatha Kim	St. Paschal Baylon School	Toronto	ON
Billy Kim	Osler School	Vancouver	BC
Bogdan Knezevic	Camilla Senior PS	Mississauga	ON
Minha Lee	Crosby Heights P.S.	Richmond Hill	ON
Alex Leung	Oakville Christian School	Oakville	ON
Maninder Longowal	Tempo School	Edmonton	AB
Graeme Lyall	Torquay E. S.	Victoria	BC
Edward Mikheev	Glen Shields P.S.	Concord	ON
Daniel Misiewicz	Frenchman's Bay P.S.	Pickering	ON
Robbie Mitchnick	Crescent School	Willowdale	ON
Tara Munikar	St. John's-Ravenscourt School	Winnipeg	MB
Kyle Onyett	Eric Graves Memorial Jr. HS	Dartmouth	NS
Pavel Petrenko	Willowdale M. S.	Toronto	ON
AdamPrins	Greenbriar Sr. P.S.	Brampton	ON
Eric Robichaud	Jack Miner P.S.	Whitby	ON
Dusan Sarenac	Lincoln Heights	Waterloo	ON
Danny Shi	Windermere Secondary	Vancouver	ON
Bernard Soubry	Loyola High School	Montreal	QC
Quinn Spicker	Erma Stephenson Elem.	Surrey	BC
Chen Sun	_	London	ON
	5		

Name Nom	School École	LOCATION ENDROIT	Prov Prov
Thushanth Thanikasegaran	St. Margaret's P.S.	West Hill	ON
Matthew Tsang	Thomas Street M.S.	Mississauga	ON
Yatsevich Tsviatana Avery Vandongen	E.S. Paul Gérin Lajoie d'outremont Jacob Hespeler SS	Outremont, Montéal Cambridge	QC ON
Angela Wang	Don Mills Middle School	Toronto	ON
Hanson Wang	Churchill Heights P.S.	Scarborough	ON
Frank Wei	Agnes Macphail PS	Scarborough	ON
Peter Wen	Hon. Vincent Massey S. S.	Windsor	ON
Meng Xuan Xiao	Villa Maria	Montreal	QC
Kefan Xie	Macklin P.S.	Scarborough	ON
Rao Xinlin	Secondaire Louis-Riel	Montreal	QC
Amy Yang	Thomas Street M. S.	Mississauga	ON
Tom Ye	The Valley's Senior Public	Mississauga	ON
Alexander Yee	Dolphin Sr. Public School	Misssissauga	ON
Hans Zhang	Camilla Senior PS	Mississauga	ON
May Zhang	Camilla Senior PS	Mississauga	ON
Roger Zhang	Osler School	Vancouver	BC
Ritchie Zhao	Jesse Ketchum School	Toronto	ON
Cissy Zhou	University of Toronto Schools	Toronto	ON
Haonan Zhou	J. B. Tyrell Sr. P. S.	Toronto	ON
Michelle Zhu	St. Andrew's Jr. High	North York	ON
Zimu Zhu	Cummer Valley Middle School	North York	ON

Canadian Student Honour Roll - Grade 8

Palmarès individuel à l'échelle nationale - 8e

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

Perfect Scores of 150

Name	SCHOOL	Location	Prov
Nom	ÉCOLE	Endroit	Prov
Charles Alexandre Bédard	Collège Jean-de la Mennais	La Prairie	QC
Matthew Biskup	St. Justin Martyr C.S.	Unionville	ON
Michael Cai	Burnaby South Secondary	Burnaby	BC
Taylor Cao	Henry Kelsey Sr. P.S.	Agincourt	ON
Justin Cao	William Berczy PS	Unionville	ON
Carl Chauvin	Churchill Heights P.S.	Scarborough	ON
Jenny Chen	St. Andrew's Jr. High	North York	ON
Nicole Chun	Cummer Valley Middle School	North York	ON
Shanaz Currim	Windfields Junior High School	North York	ON
Kiran Dhillon	Enver Creek Secondary	Surrey	BC
Chenfei Du	Pierre Laporte Middle School	Toronto	ON
Jeff Erbrecht	Dolphin Sr. Public School	Misssissauga	ON
Jonathan Erlichman	Upper Canada College	Toronto	ON
Michal Grzadkowski	College Avenue P.S.	Guelph	ON

N	C	T	D
Name	SCHOOL Éagur	LOCATION	Prov
Noм	ÉCOLE	Endroit	Prov
Yueyang Guan	Jack Miner P.S.	Whitby	ON
Ze-Chuan He	Park West	Halifax	NS
Jacky Hsu	Fraser Heights Secondary	Surrey	BC
Steve Hur	Mulgrave School	West Vancouver	BC
Mika Ilic	Charles Howitt P.S.	Richmond Hill	ON
Vithushan Jeyakumaran	V.V. Tutoring Centre	Scarborough	ON
Joyce Keung	Bayview Hill ES	Richmond Hill	ON
Nadeem Kheraj	Moscrop Secondary	Burnaby	BC
Aaron Klein	St. George's School	Vancouver	BC
Sean Krolyk	Jack Miner P.S.	Whitby	ON
Pablo Lam	Anges Macphail	Scarborough	ON
Marie-Pier Leduc	Ecole Mont-Saint-Sacrement	St-Gabriel-de-Valcartier	QC
Claire Lefevre	St. John's-Ravenscourt School	Winnipeg	MB
Joel Li	Sir Winston Churchill Secondary	Vancouver	ВС
Sui Liang	Hon. Vincent Massey S. S.	Windsor	ON
Mark Livschitz	University of Toronto Schools	Toronto	ON
Michael Maloon	West Vancouver Secondary	West Vancouver	BC
Oliver Mao	Henry Hudson Sr. P. S.	Scarborough	ON
Drew Marshall	Spectrum Alternative	Toronto	ON
Emmy Marshall-Hill	Queen Elizabeth Sr. P.S.	Mississauga	ON
Neil Mattai	St. Marguerite d'Youville	Oakville	ON
Connor Meehan	Burnaby South Secondary	Burnaby	BC
Seung Nam	St. George's School	Vancouver	BC
Stephanie Novakowski	St. John's-Ravenscourt School	Winnipeg	MB
Nicholas Ormrod	Glad Park PS	Stouffville	ON
Varoon Parekk	Bloordale Middle School	Etobicoke	ON
Jonathan Park	Walnut Grove Secondary	Langley	BC
Chan Moon Park	Bayview Middle School	Toronto	ON
Wilson Poon	Castlemore PS	Markham	ON
Tom Price	Lyndwood P.S.	Mississauga	ON
Andy Robinson	VSB/UBC Transition Program	Vancouver	BC
Prathesh Senthilvadivel	Henry Hudson Sr. P. S.	Scarborough	ON
Daniel Siu	St. George's School	Vancouver	BC
Babetha Sivanesan	Henry Hudson Sr. P. S.	Scarborough	ON
Ethan Stuart	VSB/UBC Transition Program	Vancouver	BC
James Stuart	Riverview Middle School	Riverview	NB
Tom Tang	Kitsilano Secondary Broadview P.S.	Vancouver	BC
Siyuan Tang Silviu Toderita		Ottawa Burnaby	ON BC
Nikky Tsai	Burnaby South Secondary St. George's School	Vancouver	BC BC
Simon Tseng	St. George's School	Vancouver	BC BC
Nivethan Velauthapillai	Churchill Heights P.S.	Scarborough	ON
Mike Vukovich	Homeschool	St-Bruno	QC
Jimmy Wang	Eric Hamber Secondary School	Vancouver	BC
Ye Wang	W. E. Johnston P.S.	Kanata	ON
Han Wang	Hawthorne Public School	Ottawa	ON
Brian Whalen	Armbrae Academy	Halifax	NS
Michael Wong	Tempo School	Edmonton	AB
Nathan Wong	Pierrefonds Comprenensive HS	Pierrefonds	QC
Steven Wu	Westview Middle School	Hamilton	ON
Tina Yang	Broadview P.S.	Ottawa	ON
Jennifer Yoon	Burnaby Mountain S. S.	Burnaby	BC
Jonathan Zhang	Burnaby South Secondary	Burnaby	BC
Wendy Yushan Zhang	VSB/UBC Transition Program	Vancouver	BC
Jane Han Zhang	Henry Hudson Sr. P. S.	Scarborough	ON
Helen Zhang	F.E. Osborne Junior High School	Calgary	AB
Oliver Zheng	VSB/UBC Transition Program	Vancouver	BC
Becky Zhou	Don Mills Middle School	Toronto	ON
Ivan Zverev	VSB/UBC Transition Program	Vancouver	BC
- - · ·	·		

International Results Résultats internationaux

Perfect Scores of 150 for Grade 7 Students

Gaurav Ahuja **ICAE** Troy, Michigan Radha Arghal **ICAE** Troy, Michigan Disha Bora **ICAE** Troy, Michigan Steven Chang **ICAE** Troy, Michigan Mimi Chen **ICAE** Troy, Michigan Troy, Michigan Suhas Devangam **ICAE** Andrew Gulick **ICAE** Troy, Michigan Troy, Michigan Alan Huang **ICAE** Troy, Michigan **ICAE** Jay Kachoria Troy, Michigan Srilakshmi Kadiyala **ICAE** Sandhya Kajeepeta **ICAE** Troy, Michigan Hong Kong Clara Kim Chinese International Warwick Academy Warwick, Bermuda Jason Mastalir

Sudharshan Mohanram ICAE Troy, Michigan
Ranjit Poonnen ICAE Troy, Michigan
Clara Shin Tianjin International School Nankai Dist. Tianjin, China

Akshar Wunnava ICAE Troy, Michigan Charles Zhang ICAE Troy, Michigan

Perfect Scores of 150 for Grade 8 Students

Blaine Dietrich **ICAE** Troy, Michigan Harsha Hebbale **ICAE** Troy, Michigan Roger Jia Troy, Michigan **ICAE** Prashil Pradeep **ICAE** Troy, Michigan Troy, Michigan Anupama Prasad **ICAE** Aditya Sathi **ICAE** Troy, Michigan Krithika Shanmugasundaram Troy, Michigan **ICAE** Brussels, Belgium Paul Van Koughnett International School of Brussels Troy, Michigan Kevin Zhu **ICAE**