

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

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

Fermat Contest Concours Fermat

> (11^e année – Sec. V) (Grade 11)











LA PARFAITE ALLIANCE COMMUNAUTAIREMO







Centre for Education in Mathematics and Computing Faculty and Staff / Personnel du Concours canadien de mathématiques

Ed Anderson

Lloyd Auckland

Terry Bae

Steve Brown

Ersal Cahit

Karen Cole

Jennifer Couture

Serge D'Alessio

Frank DeMaio

Fiona Dunbar

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Barry Ferguson

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Judy Fox

Steve Furino

John Galbraith

Sandy Graham

Angie Hildebrand

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Bev Marshman

Dean Murray

Jen Nissen

J.P. Pretti

Linda Schmidt

Kim Schnarr

Jim Schurter

Carolyn Sedore

Ian VanderBurgh

Troy Vasiga

Problems Committees / Comités des problèmes

Pascal Contest / Concours Pascal

Wally Webster (Chair / président), Dashwood, ON Lloyd Auckland, St. Thomas, ON Janet Christ, Walter Murray C.I., Saskatoon, SK J.P. Pretti, University of Waterloo, Waterloo, ON Jim Schurter, University of Waterloo, Waterloo, ON Tyler Somer, Kitchener, ON Anna Spanik, Halifax West H.S., Halifax, NS Aaron Warner, St. Mildred's-Lightbourn School, Oakville, ON

Cayley Contest / Concours Cayley

Jen Nissen (Chair / présidente), University of Waterloo, Waterloo, ON Jeff Anderson, Forest Heights C.I., Kitchener, ON Tom Barker, Stratford, ON Barry Ferguson, University of Waterloo, Waterloo, ON Steve Furino, University of Waterloo, Waterloo, ON Christopher Ing, Vincent Massey S.S., Windsor, ON Michelle Vidberg, Galt C.I., Cambridge, ON

Fermat Contest / Concours Fermat

Paul Fennell (Chair / président), London, ON Sandra DellaMaestra, University of Toronto Schools, Toronto, ON Steve Lau, John Diefenbaker S.S., Hanover, ON Cliff Lelievre, Oakville, ON Carol Miron, Albert Campbell C.I., Toronto, ON Dan Schnabel, Vaughan S.S., Thornhill, ON David Shepherd, Ravenna, ON Foreword Avant-Propos

The Centre for Education in Mathematics and Computing is proud to once again be the major sponsor of the Canadian Mathematics Competition this year. The year 2011 marks the 49th year of Contests produced by the Canadian Mathematics Competition.

Our congratulations go to all who participated in this year's Pascal, Cayley and Fermat Contests. This year's Contests were resounding successes, with averages of 90.5, 86.3 and 87.7 across the three Contests. The number of official contestants with perfect papers on the three Contests were 9, 5 and 3.

As always, we would like to thank the hard-working Problems Committees. Most of the members of these Committees are active secondary school teachers from across Canada who volunteers their time and contribute dozens of hours of expertise. Without their intriguing and sometimes amusing problems, these Contests would not be possible.

We would also like to thank all participants, both teachers and students. We hope that the papers provided you with some interesting mathematics to think about and play with. Thank you for your support! Please continue to encourage your colleagues and fellow students to become involved in our activities.

Le Centre d'éducation en mathématiques et en informatique à encore une fois le plaisir d'être un majeur supporter du Concours canadien de mathématiques. L'année 2011 marque la 49e année de concours produit par le Concours canadien de mathématiques.

Nos félicitations vont à tous les participants du Concours Pascal, Cayley et Fermat de cette année. Les Concours de cette année retentissaient de succès, avec des moyennes de 90,5, 86,3 et 87,7 à travers les trois Concours. Le nombre de candidats officiels possédant un concours parfait était de 9, 5 et 3.

Nous aimerions surtout remercier les Comités de problèmes pour leur dur travail. La plupart des membres de ces Comités sont des enseignant(e)s d'école secondaire actifs d'un bout à l'autre du Canada qui offre leur temps et contribuent des douzaines d'heures d'expertise. Sans leurs problèmes perspicaces et amusants, ces Concours ne seraient pas possibles.

Nous aimerions remercier aussi tous les participants incluant les enseignants et les étudiants. Nous espérons que les concours vous ont offert des mathématiques intéressantes qui vous ont amusées et portées à réfléchir. Merci pour votre soutien continué!

Enrollment Inscription

Number of schools registered by province / Nombre d'écoles inscrit par province

	Pascal	Cayley	Fermat
NL	57	48	48
NS	31	23	25
NB	31	31	31
PE	7	6	6
QC	97	103	99
ON	684	673	663
MB	54	49	47
SK	25	25	25
AB	75	44	44
BC	189	184	186
International	85	97	88
Total	1335	1283	1262

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

	Pascal	Cayley	Fermat
NL	1113	723	643
NS	851	534	478
NB	609	550	450
PE	195	118	67
QC	2986	2711	2584
ON	13933	12007	10045
MB	1428	883	753
SK	567	460	313
AB	2257	958	780
BC	5068	4381	3706
International	2760	2755	2278
Total	31767	26080	22097

Total number of students enrolled / Nombre d'inscriptions individuelles: 79944

2011 STUDENT CHAMPIONS AND CHAMPIONSHIP TEAMS PALMARÈS INDIVIDUEL ET PALMARÈS PAR ÉQUIPE 2011

PASCAL CONTEST / CONCOURS PASCAL

STUDENTS /ÉLÈVES

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

Gold Medals	School	Location	Grade
Médailles d'or	École	Endroit	Niveau
ITAI BAR NATAN	The Abelard School	Toronto	9
OLIVER FEI	Earl of March S.S.	Kanata	9
DONG JIAQI	Don Mills C.I.	North York	9
SAMUEL KIM	Ancaster H.S.	Ancaster	9
QINGFAN LIU	London Central S.S.	London	9
SEAN LUCHEN	University of Toronto Schools	Toronto	8
ERIC PAN	London Central S.S.	London	9
XIAOZE WU	Marc Garneau C.I.	North York	9
JAMESON ZHU	Windermere S.S.	Vancouver	9

TEAMS / ÉQUIPES

	School	Location	Score
	École	Endroit	Note
Champion / Première	London Central S.S.	London	442
Second / Deuxième	University of Toronto Schools	Toronto	436
Third / Troisième	Marc Garneau C.I.	North York	430
Fourth / Quatrième	Bayview S.S.	Richmond Hill	426
Fifth / Cinquième	Glenforest S.S.	Mississauga	425

2011 STUDENT CHAMPIONS AND CHAMPIONSHIP TEAMS PALMARÈS INDIVIDUEL ET PALMARÈS PAR ÉQUIPE 2011

CAYLEY CONTEST / CONCOURS CAYLEY

STUDENTS /ÉLÈVES

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

Gold Medals	School	Location	Grade
Médailles d'or	École	Endroit	Niveau
XIAOHAN CHEN	Mulgrave School	West Vancouver	10
KEVIN CHO	Sentinel S.S.	West Vancouver	10
ORKUNALP ERKAN	Marion M. Graham C.I.	Saskatoon	10
RUI SONG	Walter Murray C.I.	Saskatoon	10
DANIEL SPIVAK	Bayview S.S.	Richmond Hill	10

TEAMS / ÉQUIPES

	School	Location	Score
	École	Endroit	Note
Champion / Première	Bayview S.S.	Richmond Hill	426
Second / Deuxième	Collège Jean de Brébeuf	Montreal	414
Third / Troisième	Westdale S.S.	Hamilton	413
Fourth / Quatrième	Glenforest S.S.	Mississauga	412
Fifth / Cinquième	Richmond Hill H.S.	Richmond Hill	410
•	Victoria Park C.I.	North York	410

2011 STUDENT CHAMPIONS AND CHAMPIONSHIP TEAMS PALMARÈS INDIVIDUEL ET PALMARÈS PAR ÉQUIPE 2011

FERMAT CONTEST / CONCOURS FERMAT

STUDENTS /ÉLÈVES

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

Gold Medals	School	Location	Grade
Médailles d'or	École	Endroit	Niveau
XIAOYU DENG	Unionville H.S.	Markham	11
ANQI DONG	Walter Murray C.I.	Saskatoon	11
JUN HO JUNG	Vancouver College H.S.	Vancouver	11
DAVID LIANG	A.Y. Jackson S.S.	North York	10
YUE LIU	Fort Richmond C.I.	Winnipeg	11
BART SUH	Lambrick Park S.S.	Victoria	11
ERIC ZHAN	University of Toronto Schools	Toronto	11

TEAMS / ÉQUIPES

	School	Location	Score
	École	Endroit	Note
Champion / Première	University of Toronto Schools	Toronto	424
Second / Deuxième	Unionville H.S.	Markham	415
Third / Troisième	A.Y. Jackson S.S.	North York	414
	Markham District H.S.	Markham	414
Fifth / Cinquième	West Vancouver S.S.	West Vancouver	412

 ${\rm Champions-2011} \\ {\rm Champions-2011}$

2011 FERMAT CONTEST PROVINCIAL CHAMPIONS CHAMPIONS PROVINCIAUX AU CONCOURS FERMAT 2011

Each student below will receive a \$200 prize / Chaque étudiant ci-dessous recevrait un prix de 200 \$

Province	Student	School	Location
Province	Étudiant	École	Endroit
NL	TIMOTHY ELLIOTT	Mount Pearl Sr. H.S.	Mount Pearl
NS	WONJAE CHO	Halifax Grammar School	Halifax
NS	CHRISTOPHER MITCHELTREE	Halifax West H.S.	Halifax
NS	AMANDA STANTON	Halifax Grammar School	Halifax
NB	ANTONIO MOLINA	Ste. Anne	Fredericton
PE	THUNDER ZHENG	Colonel Gray Sr. H.S	Charlottetown
QC	HENG YU LIN	E.S. St. Luc	Montreal
ON Central	XIAOYU DENG	Unionville H.S.	Markham
ON Est	JAMES RICKARDS	Colonel By S.S.	Gloucester
ON Metro	DAVID LIANG	A.Y. Jackson S.S.	North York
ON Metro	ERIC ZHAN	University of Toronto Schools	Toronto
ON Nord	YUNYU WANG	Sir Winston Churchill C.V.I.	Thunder Bay
ON Ouest	JAY YOUNG WOO	London Central S.S.	London
MB	YUE LIU	Fort Richmond C.I.	Winnipeg
SK	ANQI DONG	Walter Murray C.I.	Saskatoon
AB	MARIYA SARDARLI	Strathcona H.S.	Edmonton
BC	JUN HO JUNG	Vancouver College H.S.	Vancouver
BC	BART SUH	Lambrick Park	Victoria

Correct Answers Bonnes Rponses

#	Pascal	Cayley	Fermat
1	В	В	D
2	E	В	A
3	C	A	A
4	В	\mathbf{C}	D
5	A	D	$^{\mathrm{C}}$
6	A	В	$^{\mathrm{C}}$
7	В	A	D
8	D	\mathbf{C}	В
9	E	D	D
10	C	${ m E}$	В
11	E	D	${ m E}$
12	D	В	${ m E}$
13	A	A	В
14	\mathbf{C}	\mathbf{C}	D
15	A	A	${ m E}$
16	D	${ m E}$	С
17	A	\mathbf{C}	${ m E}$
18	C	A	В
19	E	D	$^{\mathrm{C}}$
20	D	В	A
21	D	\mathbf{E}	A
22	C	\mathbf{C}	${ m E}$
23	В	В	A
24	A	A	D
25	A	D	В

Pascal Contest Concours Pascal

Number of Contestants / Nombre de concurrents: 26186

Average mark / Note moyenne: 90.52

Percentage of contestants selecting each option / Pourcentage de concurrents par choix:

	Correct						% not	% correct
	Answer/						attempted/	of attempted
	Bonne						% sans	% tentatives
	Réponse						réponse	réussies
#		A	В	С	D	\mathbf{E}		
1	В	0.31	97.53	0.68	0.71	0.65	0.06	97.60
2	\mathbf{E}	0.12	0.69	0.18	0.19	98.56	0.22	98.77
3	\mathbf{C}	1.23	0.92	95.92	0.94	0.60	0.34	96.25
4	В	4.15	84.46	1.22	2.35	6.11	1.67	85.89
5	A	90.22	1.00	1.12	4.03	3.23	0.35	90.54
6	A	73.32	9.47	5.24	7.57	2.85	1.50	74.44
7	В	1.70	85.95	5.20	3.36	0.71	3.04	88.65
8	D	1.25	3.03	14.64	76.25	4.41	0.37	76.53
9	\mathbf{E}	2.76	4.00	2.98	3.40	84.11	2.69	86.44
10	\mathbf{C}	2.62	25.54	55.54	4.57	5.71	5.98	59.07
11	\mathbf{E}	11.07	0.93	1.50	3.61	82.10	0.74	82.71
12	D	2.94	4.78	17.68	56.99	6.40	11.16	64.15
13	A	77.31	4.43	5.22	1.60	2.31	9.09	85.04
14	\mathbf{C}	5.04	4.04	56.51	11.45	5.32	17.59	68.58
15	A	77.02	0.89	9.38	8.57	1.51	2.58	79.06
16	D	3.07	10.08	17.93	54.92	9.60	4.36	57.42
17	A	59.12	6.51	9.37	3.39	12.57	8.99	64.96
18	C	1.44	8.74	29.97	44.91	1.92	12.98	34.44
19	\mathbf{E}	6.26	8.08	17.58	13.49	20.64	33.90	31.22
20	D	14.88	7.55	7.51	22.63	6.93	40.46	38.01
21	D	3.18	4.11	10.30	60.43	8.67	13.26	69.67
22	С	25.10	14.59	28.92	5.35	4.19	21.81	36.98
23	В	9.22	9.67	8.68	6.69	7.44	58.24	23.16
24	A	5.06	7.50	10.82	8.77	10.06	57.74	11.98
25	A	11.85	8.86	11.37	10.44	19.41	38.03	19.12

Cayley Contest Concours Cayley

Number of Contestants / Nombre de concurrents: 21060

Average mark / Note moyenne: 86.33

Percentage of contestants selecting each option / Pourcentage de concurrents par choix:

	Correct						% not	% correct
	Answer/						attempted/	of attempted
	Bonne						% sans	% tentatives
	Réponse						réponse	réussies
#	_	A	В	С	D	E	_	
1	В	0.70	97.62	1.13	0.11	0.37	0.02	97.64
2	В	0.34	97.59	0.20	0.17	1.42	0.21	97.80
3	A	93.09	4.23	1.16	0.33	0.26	0.87	93.91
4	С	0.91	0.51	96.48	0.44	1.09	0.50	96.97
5	D	1.08	13.78	1.43	79.31	1.32	3.01	81.77
6	В	9.43	84.14	0.93	1.87	1.28	2.29	86.12
7	A	82.19	1.46	9.91	0.79	0.92	4.69	86.23
8	С	1.10	12.59	72.39	2.31	10.27	1.29	73.33
9	D	2.61	6.93	2.63	76.73	1.76	9.29	84.59
10	E	1.31	2.58	9.71	14.37	68.96	3.01	71.10
11	D	2.64	5.45	1.46	86.57	1.86	1.97	88.31
12	В	24.67	70.33	1.60	1.57	0.44	1.33	71.28
13	A	65.74	7.87	2.43	2.84	16.03	5.04	69.23
14	С	0.94	5.53	36.49	47.63	0.96	8.39	39.83
15	A	31.94	11.09	6.26	24.89	14.43	11.33	36.03
16	E	7.89	16.52	4.59	13.82	34.79	22.34	44.79
17	С	5.12	5.63	65.95	2.83	6.21	14.21	76.87
18	A	48.27	28.17	2.31	5.65	3.29	12.26	55.01
19	D	4.35	15.78	7.23	39.12	8.22	25.24	52.33
20	В	6.51	12.47	8.07	6.99	6.26	59.64	30.89
21	E	3.11	5.04	7.61	4.52	38.55	41.11	65.46
22	C	5.36	6.72	15.01	7.81	34.88	30.17	21.49
23	В	3.57	8.82	12.56	10.67	9.81	54.52	19.40
24	A	9.88	9.36	14.82	11.85	17.28	36.75	15.62
25	D	4.88	9.67	15.25	6.65	6.62	56.88	15.43

Fermat Contest Concours Fermat

Number of Contestants / Nombre de concurrents: 17349

Average mark / Note moyenne: 87.65

Percentage of contestants selecting each option / Pourcentage de concurrents par choix:

	Correct						% not	% correct
	Answer/						attempted/	of attempted
	Bonne						% sans	% tentatives
	Réponse						réponse	réussies
#	_	A	В	С	D	E	_	
1	D	1.27	0.63	2.27	95.19	0.34	0.26	95.43
2	A	97.04	0.35	0.81	0.60	1.07	0.09	97.13
3	A	96.33	0.56	0.97	0.49	1.19	0.43	96.74
4	D	1.73	4.99	2.33	88.26	2.37	0.28	88.51
5	С	0.85	1.52	93.38	0.77	1.82	1.63	94.92
6	С	0.79	0.84	88.92	8.31	0.20	0.91	89.74
7	D	17.59	5.21	4.27	69.91	1.18	1.80	71.20
8	В	21.37	74.37	1.33	1.52	0.49	0.89	75.04
9	D	2.50	9.75	16.28	59.80	8.92	2.72	61.47
10	В	0.59	89.96	2.63	0.47	3.01	3.30	93.04
11	E	7.06	12.98	5.12	12.96	41.65	20.20	52.18
12	E	6.62	2.63	5.28	5.36	65.84	14.23	76.77
13	В	7.82	71.59	3.52	6.69	2.04	8.30	78.08
14	D	17.18	9.42	3.57	61.66	3.70	4.43	64.52
15	E	8.73	7.31	3.67	3.41	64.71	12.14	73.65
16	С	5.69	19.60	27.72	9.10	3.85	34.00	42.00
17	E	1.98	2.66	4.20	8.38	56.89	25.86	76.74
18	В	14.27	59.84	3.68	5.75	9.83	6.60	64.07
19	С	8.51	2.40	33.33	20.17	2.17	33.39	50.03
20	A	25.69	9.01	3.04	5.35	2.40	54.48	56.43
21	A	24.07	7.48	4.96	9.33	10.59	43.53	42.63
22	E	8.36	6.58	9.66	7.04	14.39	53.93	31.23
23	A	7.21	9.57	19.07	10.80	12.31	41.02	12.22
24	D	6.88	6.43	7.19	7.60	6.43	65.43	21.99
25	В	5.84	5.85	7.99	9.50	10.13	60.64	14.86

Score/ Note	Pascal Rank/	Cayley Rank/	Fermat Rank/	Score/ Note	Pascal Rank/	Cayley Rank/	Fermat Rank/
	Position	Position	Position		Position	Position	Position
150	1	1	1	99	7794	4740	4083
149				98	8240	4930	4320
148				97	8713	5305	4604
147				96	9208	5568	4861
146	10		4	95	9675	5948	5155
145	10	C	$\frac{4}{5}$	94	10126	6243	5484
144	11	6	5	93	10642	6617	5799
143	17	0	0	92	11122	6880	6076
142	17	8	8	91	11572	7248	6431
141	58			90	12104	7543 7048	6741
140	50			89	12560	7948	7006
139 138	59 62	16	26	88	13090 13541	8348	7353
138 137	84	10	39	87		$8741 \\ 9045$	7701
13 <i>i</i> 136	99	19	39 46	86	14004 14472	9434	8049
130 135	99 155	19	40	85 84		9434 9783	8372
133 134	156	35	78		14878		$8657 \\ 8939$
134	246	39 70	119	83 82	15327 15734	$10167 \\ 10542$	9283
132	240 250	70	119	81	16137	10942	9283 9613
132	303	95	140	80	16137 16522	10901 11250	9936
131	315	99	151	79	16907	11610	10207
129	387	140	197	78	17239	11963	10207 10437
129	414	140	209	77	17618	11903 12321	10437
120 127	539	217	274	76	17983	12667	10710
126	563	227	279	75	18301	12991	10333 11256
125	722	319	357	74	18612	13318	11250 11475
124	761	330	377	73	18931	13617	11475
123	913	416	435	72	19228	13901	11917
122	969	429	465	71	19546	14218	12178
121	1166	571	549	70	19824	14513	12392
120	1245	596	587	69	20081	14792	12584
119	1479	817	696	68	20313	15036	12772
118	1555	841	735	67	20538	15313	12922
117	1787	1020	866	66	20776	15554	13105
116	1896	1051	911	65	21000	15788	13299
115	2206	1251	1025	64	21163	16009	13441
114	2354	1309	1086	63	21355	16225	13586
113	2683	1587	1263	62	21523	16444	13710
112	2851	1645	1349	61	21682	16618	13840
111	3204	1899	1530	60	21850	16794	13952
110	3421	1980	1633	59	21978	16954	14045
109	3813	2248	1840	58	22109	17089	14147
108	4091	2352	1945	57	22227	17239	14235
107	4537	2674	2159	56	22348	17360	14325
106	4800	2794	2314	55	22469	17475	14409
105	5264	3138	2582	54	22584	17597	14497
104	5576	3259	2714	53	22687	17698	14559
103	5997	3597	3011	52	22758	17795	14633
102	6346	3766	3230	51	22833	17893	14699
101	6862	4154	3522	50	22913	17954	14763
100	7295	4332	3752	49	22980	18029	14817

Score/ Note	Pascal Rank/	Cayley Rank/	Fermat Rank/
	Position	Position	Position
48	23041	18099	14869
47	23093	18151	14908
46	23149	18207	14957
45	23196	18245	14996
44	23240	18296	15033
43	23280	18328	15061
42	23318	18361	15077
41	23353	18403	15105
40	23392	18437	15134
39	23412	18453	15164
38	23436	18476	15183
37	23455	18496	15194
36	23478	18521	15210
35	23507	18549	15228
34	23517	18566	15240
33	23531	18575	15248
32	23540	18586	15261
31	23549	18603	15275
30	23556	18609	15279
29	23561	18622	15286
28	23569	18630	15288
27	23572	18633	15296
26	23575	18641	15301
25	23579	18644	15305
24	23585	18647	15310
23	23588	18649	15313
22	23592	18651	15314
21	23595	18653	15317
20	23597	18657	15320
19	23602	18660	15322
18	23604		15324
17	23606	18662	15326
16	23607	18663	15328
15		18664	15331
14			15336
13	00000		15005
12	23608		15337
11	23609		
10			

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

N.B. Ces rangs se rapportent seulement aux concurrents officiels

Scores/ Notes	Pascal # of Schools/ No d'écoles	Cayley # of Schools/ No d'écoles	Fermat # of Schools/ No d'écoles
440 - 450	1	0	0
430 - 439	2	0	0
420 - 429	4	1	1
410 - 419	17	5	5
400 - 409	19	3	14
390 - 399	29	20	23
380 - 389	36	26	16
370 - 379	49	31	22
360 - 369	72	39	33
350 - 359	81	51	46
340 - 349	93	66	63
330 - 339	102	71	65
320 - 329	111	85	81
310 - 319	89	69	84
300 - 309	94	78	94

Number of three student teams / Nombre d'équipes de trois élèves

Pascal Contest / Concours Pascal: 980 Cayley Contest / Concours Cayley: 925 Fermat Contest / Concours Fermat: 921



The CENTRE for EDUCATION in MATHEMATICS and COMPUTING

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2011 2011

Results Résultats

Pascal Contest Concours Pascal

(Grade 9)

 $Cayley\ Contest$ Concours Cayley
(10^e année – Sec. IV)

Fermat Contest Concours Fermat

> (11^e année – Sec. V) (Grade 11)

Pascal Contest Honour Rolls Palmarès pour le concours Pascal

2011 Pascal Contest/Concours Pascal Team List/Palmarès d'équipes

Rank/	School/	City/Ville	Score/Note
Rang	École	•	
1	London Central S.S.	London	442
2	University of Toronto Schools	Toronto	436
3	Marc Garneau C.I.	North York	430
4	Bayview S.S.	Richmond Hill	426
5	Glenforest S.S.	Mississauga	425
6	Sir Winston Churchill S.S.	Vancouver	423
7	Acadia Jr. H.S.	Winnipeg	422
8	Moscrop S.S.	Burnaby	418
8	Vincent Massey S.S.	Windsor	418
10	Upper Can Col-Upper School	Toronto	416
11	Earl Haig S.S.	North York	415
12	Burnaby North S.S.	Burnaby	414
13	University Hill S.S.	Vancouver	413
14	College Jean de Brebeuf	Montreal	412
14	Markham District H.S.	Markham	412
14	Martingrove C.I.	Etobicoke	412
14	Port Moody Sr. S.S.	Port Moody	412
14	Zion Heights Jr. H.S.	North York	412
19	Brother Andre C.H.S.	Markham	410
19	Colonel By S.S.	Gloucester	410
19	Don Mills C.I.	North York	410
19	Richmond S.S.	Richmond	410
19	Semiahmoo S.S.	Surrey	410
19	St. Theresa of Lisieux C.H.S.	Richmond Hill	410
25	Fredericton H.S.	Fredericton	408
25	St. Andrews J.H.S.	North York	408
25	The Woodlands School	Mississauga	408
28	Lord Byng S.S.	Vancouver	407
28	Northern S.S.	Toronto	407
30	St. Michael's Univ. School	Victoria	406
30	Victoria Park C.I.	North York	406
30	West Vancouver S.S.	West Vancouver	406
33	David Thompson S.S.	Vancouver	404
33	Fraser Heights S.S.	Surrey	404
33	R.E. Mountain S.S.	Langley	404
36	Appleby College	Oakville	402
36	Burnaby Mountain S.S.	Burnaby	402
36	Burnaby South S.S.	Burnaby	402
36	Earl of March S.S.	Kanata	402
36	Pinetree S.S.	Coquitlam	402
36	Walnut Grove S.S.	Langley	402
42	St. George's School	Vancouver	400
42	St. John's-Ravenscourt School	Winnipeg	400
44	Tom Baines School	Calgary	399
45	Pierre Elliott Trudeau H.S.	Markham	398
46	Dr. Norman Bethune C.I.	Scarborough	397
47	Merivale H.S.	Nepean	396
47	Pleasant View Jr. H.S.	North York	396
47	Steveston London S.S.	Richmond	396
47	The Abelard School	Toronto	396
51	St. Robert C.H.S.	Thornhill	395

Name/Nom		School/École	Location/ Endroit	Grade/Niveau
Group I/Groupe I		Scores/Notes 150 - 146		
BAR NATAN	ITAI	The Abelard School	Toronto	9
FEI	OLIVER	Earl of March S.S.	Kanata	9
JIAQI	DONG	Don Mills C.I.	North York	9
KIM	SAMUEL	Ancaster H.S.	Ancaster	9
LIU	QINGFAN	London Central S.S.	London	9
LUCHEN	SEAN	University of Toronto Schools	Toronto	8
PAN	ERIC	London Central S.S.	London	9
WU	XIAOZE	Marc Garneau C.I.	North York	9
ZHU	JAMESON	Windermere S.S.	Vancouver	9
2110	OAMEDON	WINGEIMETE B.B.	valicouver	,
Group II/Groupe	II	Scores/Notes 145 - 142		
ANDREW	KANG	St. Michael's Univ. School	Victoria	9
CAI	VICTOR	Sir Winston Churchill S.S.	Vancouver	9
CHANG	CHEN	Vincent Massey S.S.	Windsor	9
CHANG	MICHAEL	-	Toronto	
		University of Toronto Schools	Belleville	8
CHO	DAVID	Nicholson Catholic College St. Theresa of Lisieux C.H.S.		9
CHO	WON BUM		Richmond Hill Scarborough	9
CHOW	MICHAEL	Albert Campbell C.I.	~	9
CONGRAM	BEN	Stratford Northwestern S.S.	Stratford	9
CUI	ALEXANDER	University of Toronto Schools	Toronto	8
DANIEL	PARK	Earl Haig S.S.	North York	9
DIEU	ALBERT	Runnymede C.I.	York	9
FAN	KATHY	Moscrop S.S.	Burnaby	8
FANG	GLORIA	University of Toronto Schools	Toronto	8
FENG	JERRY	Sandwich S.S.	Windsor	9
HU	DANCHENG	Acadia Jr. H.S.	Winnipeg	9
HUANG	HARVEY	Matthew McNair S.S.	Richmond	9
JINWOOK KIM	ANDREW	University of Toronto Schools	Toronto	8
KESELJ	STEFAN	Bedford Jr. H.S.	Bedford	9
KIM	DONG KYU	Port Moody Sr. S.S.	Port Moody	9
LAI	ROBERT	Markham District H.S.	Markham	9
LAU	WOODY	Upper Can Col-Upper School	Toronto	9
LE	ANTHONY	Bayview S.S.	Richmond Hill	9
LEE	JAEWOO	Acadia Jr. H.S.	Winnipeg	9
LEOWINATA	STELLA	Canada's National Ballet School	Toronto	9
LEPAGE	CHARLES	College Notre-Dame du Sacré-Coeur	Montreal	9
LI	RICHARD	Glenforest S.S.	Mississauga 	9
LI	VICTOR	St. John's-Ravenscourt School	Winnipeg	9
LI	XINGLIN	Bayview S.S.	Richmond Hill	9
LIANG	JEFFREY	Martingrove C.I.	Etobicoke	9
LING	VICTOR	London Central S.S.	London	9
LIU	ANGELICA	St. Robert C.H.S.	Thornhill	9
LORRY	ZHOU	Bayview S.S.	Richmond Hill	9
QIN	LIFEI	Glenforest S.S.	Mississauga	9
SHEN	JACQUELINE	Burnaby South S.S.	Burnaby	9
SUN	FOREST	Semiahmoo S.S.	Surrey	8
TING	TA JIUN	Burnaby Central S.S.	Burnaby	9
ULHAQ	MATEEN	Pinetree S.S.	Coquitlam	9
WANG	JERRY	Cawthra Park S.S.	Mississauga	9
WANG	JOY	Zion Heights Jr. H.S.	North York	9
WEI	BEN		North York	8
XU	YUWEI	Vincent Massey S.S.	Windsor	9

Group II/Groupe	II	Scores/Notes 145 - 142		
YANG	MICHAEL	Dr. Norman Bethune C.I.	Scarborough	9
YEUNG	BRIAN	Bayview S.S.	Richmond Hill	9
YIN	DAVID	The Woodlands School	Mississauga	9
ZHANG	GAVIN	Sir Winston Churchill S.S.	Vancouver	9
ZHANG	RICHARD	College Jean de Brebeuf	Montreal	9
ZHOU	AMELIA	Marc Garneau C.I.	North York	9
ZHU	FRANK	University Hill S.S.	Vancouver	9
Group III/Groupe	III	Scores/Notes 141 - 137		
BAO	YUNR U	Lord Byng S.S.	Vancouver	9
CHEN	TONY	Parkdale C.I.	Toronto	9
CHENG	FRANK	Burnaby North S.S.	Burnaby	8
CHENG	LINYI	Colonel By S.S.	Gloucester	9
CHUN	RUSSELL	Moncton H.S.	Moncton	9
CONSTANTINESCU	BOGDAN	Huron Heights S.S.	Kitchener	9
GUO	WENDY	Moscrop S.S.	Burnaby	8
HE	DAN IEL	Fredericton H.S.	Fredericton	9
HEINZLE	JOSEPH	St. Theresa of Lisieux C.H.S.	Richmond Hill	9
НО	FELIX	College Regina Assumpta	Montreal	9
HONG	CHANNY	Upper Can Col-Upper School	Toronto	9
HUNT	JEREMY	University of Toronto Schools	Toronto	8
JEREMY	HSU	University Hill S.S.	Vancouver	9
JI	AMY	Victoria Park C.I.	North York	9
JIANG	FRANK	Northern S.S.	Toronto	9
JIANG	GEORGE	Glenforest S.S.	Mississauga	9
JIANG	JIAHUI	Bayview S.S.	Richmond Hill	9
JOE	JACKY	St. Michael's Univ. School	Victoria	9
KWOK	CHLOE	Burnaby North S.S.	Burnaby	9
LEE	ARCHIE	Glenforest S.S.	Mississauga	9
LI	BRIAN	Brother Andre C.H.S.	Markham	9
LIU	ZHENGLIN	University of Toronto Schools	Toronto	8
LU	SOPHIA	St. Andrews J.H.S.	North York	9
LU	YIFAN	Sir Winston Churchill S.S.	Vancouver	9
MANSON HING	JASON	Brother Andre C.H.S.	Markham	9
PANG	MICHAEL	Acadia Jr. H.S.	Winnipeg	8
PARK			Fredericton	9
	JOHN	Leo Hayes H.S.		9
PATEL	NIKHIL	O'Neill C.V.I.	Oshawa	9
RIVETT	LUKE	Sir Oliver Mowat C.I.	Scarborough	_
ROH	DOOHYEUN	Kitsilano S.S. (English)	Vancouver	9
SHI	JERRY	Lord Byng S.S.	Vancouver	9
VINCENT	DAVID	Academie Lafontaine	Saint-Jerome	9
WONG	MICHAEL	Holy Trinity School	Richmond Hill	9
WU	JIM	Bur Oak S.S.	Markham	9
XIA	LOUISE	University of Toronto Schools	Toronto	8
ZHANG	BOB	Prince Of Wales Mini School	Vancouver	9
ZHANG	CINDY	Burnaby North S.S.	Burnaby	8
ZHANG	DAVID	Richmond S.S.	Richmond	9
ZHANG	SHAWN	Richmond S.S.	Richmond	9
ZHAO	ALICE	Moscrop S.S.	Burnaby	9
ZHOU	IVAN	Earl Haig S.S.	North York	9
Group IV/Groupe	IV	Scores/Notes 136 - 136		
• •			North Veril	0
BAE	JINY	St. Andrews J.H.S.	North York	9
BOODAGHIANS	LEVON	College Jean de Brebeuf	Montreal	9

Group IV/Groupe IV

Scores/Notes 136 - 136

Gloup IV/Gloupe	5 I V	300163/110163 130 - 130		
CAMPBELL	ANTON	Lisgar C.I.	Ottawa	9
CHAN	CALVIN	William Lyon Mackenzie C.I.	North York	9
CHEN	ABEL	Burnaby Mountain S.S.	Burnaby	8
CHEN	ANDREW	Markham District H.S.	Markham	9
CHEN	DANIEL	Mentor College	Mississauga	9
CHEN	DENIS	West Vancouver S.S.	West Vancouver	9
CHEN SONG	DALE	Vernon Barford School	Edmonton	8
CHIANG	BOBBY	Marc Garneau C.I.	North York	9
CORJA	VLADIMIR	Marc Garneau C.I.	North York	9
DAS	ANINDITEE	Marc Garneau C.I.	North York	9
DONG	BRANDON	David Thompson S.S.	Vancouver	9
FAN	ANGELA	Bayview S.S.	Richmond Hill	9
GAO	DANIEL	Burnaby North S.S.	Burnaby	8
HAUGEN	ERIC	Highland S.S.	Dundas	9
HE	YI ZE	College Jean de la Mennais	La Prairie	9
HUANG	TODD	Burnaby Mountain S.S.	Burnaby	9
JEONG	AHWON	Colonel By S.S.	Gloucester	9
KANTHAN	THEERAN	Woburn C.I	Scarborough	9
KIM	HARRY	R.E. Mountain S.S.	Langley	8
KIM	MATTHEW	Fraser Heights S.S.	Surrey	8
KWON	EEHJOON	Mount Douglas S.S.	Victoria	9
LALIBERTE	NICOLAS	Redeemer Christian H.S.	Nepean	9
LAW	CURTIS	Queen Elizabeth H.S.	Calgary	9
LEE	JANE	Port Moody Sr. S.S.	Port Moody	9
LEE	JASON	Walnut Grove S.S.	Langley	8
LEE	JUNHO	Leo Hayes H.S.	Fredericton	9
LEE	NICHOLAS	Sinclair S.S.	Whitby	9
LEE	SALLY	West Vancouver S.S.	West Vancouver	8
LIU	MICHAEL	University of Toronto Schools	Toronto	8
MA	ZECHEN	Glenforest S.S.	Mississauga	9
MA	ZHUORAN	Martingrove C.I.	Etobicoke	9
MACDONALD	JAKE	Notre Dame Regional Secondary	Vancouver	9
MILLER	ADAM	Upper Can Col-Upper School	Toronto	9
NANAYAKKARA	JINADARI	Fredericton H.S.	Fredericton	9
PARK	JUNG IN	Meadowridge School	Maple Ridge	8
QUAN	HENRY		North York	8
SIEMONS	JACOB	Kingston C.V.I.	Kingston	9
SISI	REN	Highland Jr. H.S.	North York	9
SU	ZI QING	Bayview S.S.	Richmond Hill	9
TANG	JASON	Brother Andre C.H.S.	Markham	9
TATARU	IOAN	College Regina Assumpta	Montreal	9
TIAN	KEVIN	St. George's School	Vancouver	9
TONG	BRANDON	David Thompson S.S.	Vancouver	9
WANG	ALINA	Colonel By S.S.	Gloucester	9
WU	GLORIA	University of Toronto Schools	Toronto	8
WU	STEVEN	Merivale H.S.	Nepean	9
YE	ZIHUA	Bishop Pinkham School	Calgary	9
YU	CONNIE	_	North York	8
YU	KARMIN	Royal West Academy	Montreal-Ouest	9
YUNG	CHI CHEUK	Burnaby North S.S.	Burnaby	9
ZHANG	CHI	Kelvin H.S.	Winnipeg	9
ZHOU	JOHN	University of Toronto Schools	Toronto	8
ZHOU	YEXINHAO	Marc Garneau C.I.	North York	9
ZINN	CHARLES	Waterloo C.I.	Waterloo	9

Group V/Groupe V

Scores/Notes 135 - 132

Gloup V/Gloupe	V	300168/140168 133 - 132		
AHN	TRACY	West Vancouver S.S.	West Vancouver	9
AHUJA	SAHIL	Appleby College	Oakville	9
BUCHWITZ	KAYLA	Westmount Charter School	Calgary	9
CAO	VICTORIA	Vincent Massey S.S.	Windsor	9
CATT	GREG	Osgoode Township H.S.	Metcalfe	9
CHAI	JUSTIN	Upper Can Col-Upper School	Toronto	9
CHAN	JONATHAN	Grandview Heights Elem. Jr. H.S.	Edmonton	9
CHAN	MICHAEL	Leaside H.S.	East York	9
CHANG	SHARON	R.E. Mountain S.S.	Langley	9
CHANG	VICTOR	Port Moody Sr. S.S.	Port Moody	9
CHEN	BEATRICE	Pierre Elliott Trudeau H.S.	Markham	9
CHEN	IAN	Steveston London S.S.	Richmond	9
CHEN	JINGXUAN	Colonel By S.S.	Gloucester	9
CHEN	MARY	Highland Jr. H.S.	North York	9
CHEN	SHANG TING	Upper Can Col-Upper School	Toronto	9
CHEN	VICTORIA	Port Moody Sr. S.S.	Port Moody	9
CHEUNG	KINTON	Upper Can Col-Upper School	Toronto	8
CHISHOLM	THOMAS	Upper Can Col-Upper School	Toronto	9
CHISHOLM	MEREDITH	Balmoral Hall School	Winnipeq	9
			1 3	9
CHOY	CHRISTIE	Crofton House School	Vancouver	9
CHUNG	LINUS	Seaquam S.S.	Delta	
CURRIE	ELIZABETH	Havergal College	North York	9
DENNEE	JACOB	Frontenac S.S.	Kingston	9
DONG	ELISA	Victoria Park C.I.	North York	9
DONG	KELLY	Centennial C. & V.I.	Guelph	9
FAN	BOYAN	College Jean de Brebeuf	Montreal	9
FARAZ	SAYAN	Marc Garneau C.I.	North York	9
FENG	JULIANNE	Richmond Hill H.S.	Richmond Hill	9
FERRABEE	ROWAN	Nepean H.S.	Ottawa	9
FLOREA	ALEXANDRU	Martingrove C.I.	Etobicoke	9
FLORESCU	ALEXANDRA	Holy Trinity School	Richmond Hill	9
GAO	KEVIN	Bur Oak S.S.	Markham	9
HUANG	PEISHAN	Fraser Heights S.S.	Surrey	9
HURTADO	ANDREA	Holy Name of Mary Col. Sch.	Mississauga	9
HUYNH	ATHENA	University Hill S.S.	Vancouver	9
JALBERT	OLIVIER	College Beaubois	Pierrefonds	9
JANES	ALVIN	Marc Garneau C.I.	North York	9
JEONG	BRIAN	Elgin Park S.S.	Surrey	8
JI	RAYMOND	Pierre Elliott Trudeau H.S.	Markham	9
JIANG	WARREN	Tom Baines School	Calgary	9
JIANG	XINRONG	York House School	Vancouver	9
JIN	BEN	Earl Haig S.S.	North York	9
KANG	HANSON	West Vancouver S.S.	West Vancouver	8
KARWA	FARHAN	Fraser Heights S.S.	Surrey	9
KIM	CHELSEA	Abbey Park H.S.	Oakville	9
KIM	JERRY	Mount Douglas S.S.	Victoria	9
KIM	JESSICA	Martingrove C.I.	Etobicoke	9
KIM	MIN	Zion Heights Jr. H.S.	North York	9
KLEIN	LUCAS	Academy for Gifted Children-PACE	Richmond Hill	8
KO	JOOHYUNG	Zion Heights Jr. H.S.	North York	9
KO	SOOMIN	Zion Heights Jr. H.S.	North York	9
КОН	DONGSEOK	Appleby College	Oakville	9
KWAK	FRED	-	Edmonton	9
LEE	CATHERINE	Appleby College	Oakville	9
LEE	CHANGEUN	R.E. Mountain S.S.	Langley	9
LEE	DO EON	King's Christian Collegiate	Oakville	9
LEE	IAN	St. George's School	Vancouver	9
		St. George & Benoon	· alloouvel	_

Group V/Groupe V

Scores/Notes 135 - 132

Gloup V/Gloupe	V	300168/NOTES 133 - 132		
LEE	JAMES	Walnut Grove S.S.	Langley	9
LEE	MICHAEL	Upper Can Col-Upper School	Toronto	9
LEE	OLIVER	Moscrop S.S.	Burnaby	9
LEE	SEOJIN	Cameron Heights C.I.	Kitchener	9
LEVESQUE	MATT	Grant Park H.S.	Winnipeg	9
LI	SISLEY	Rockridge S.S.	West Vancouver	9
LI	ZIHUI	Ideal Mini School	Vancouver	9
LIANG	JEFFREY	Merivale H.S.	Nepean	9
LIU	FRANK	Don Mills C.I.	North York	9
LIU	JENNIFER	Pleasant View Jr. H.S.	North York	9
LU	DAVID	ricabane view or. n.b.	North York	8
LUKE	KIM	The Woodlands School	Mississauga	9
MCCONNELL	SAGE	Hebbville Academy	Hebbville	9
		-		9
MCKENZIE	CONOR	Abbotsford School of Integrated Arts	Abbotsiord	9
MIAO	SIMON	Moscrop S.S.	Burnaby	9
MURAI	ADAM	Crescent School	North York	8
NADKARNI	KABIR	St. Francis Xavier S.S.	Mississauga	9
NATALIE	LEE	Pierre Elliott Trudeau H.S.	Markham	9
NIU	YUDONG	Acadia Jr. H.S.	Winnipeg	9
NOH	JAEHOON	Halifax Grammar School	Halifax	9
NUZ	ALICE	Vaughan S.S.	Thornhill	9
OCAY	DON DANIEL	E.S. St. Luc	Montreal	9
OH	JUSTIN	Walnut Grove S.S.	Langley	9
PANG E	JEFFREY	Bayview S.S.	Richmond Hill	9
PARK	DANIEL	King's Christian Collegiate	Oakville	9
PARK	JUSTIN	Port Moody Sr. S.S.	Port Moody	9
PARK	YOONSIK	Acadia Jr. H.S.	Winnipeg	8
PHOENIX	WORTH	Delta S.S.	Delta	9
PITA	CAMERON	Preston H.S.	Cambridge	9
RAW	JAKE	Waterloo C.I.	Waterloo	9
				9
ROBITAILLE	CHARLOTTE	E.S. de Rochebelle	Quebec	-
ROY	MELANIE	All Saints C.S.S.	Whitby	9
SEO	SOLBEE	Fredericton H.S.	Fredericton	9
SHANG	ANDY	Zion Heights Jr. H.S.	North York	9
SHENG	SHAWN	Centennial C. & V.I.	Guelph	9
SHI	CYNTHIA	Bayview S.S.	Richmond Hill	9
SHIH	ANDY	Steveston London S.S.	Richmond	9
SI	JENNY	Walter Murray C.I.	Saskatoon	9
SMOCKUM	BLAIRE	Havergal College	North York	9
SU	STANLEY	North Toronto C.I.	Toronto	9
SU	ZIYI	Marc Garneau C.I.	North York	9
SUHH	CHRISTIAN	Southridge School	Surrey	9
SZE	SERENA	Earl Haig S.S.	North York	9
TANG	KEVIN	Marc Garneau C.I.	North York	9
TOH	SAMANTHA	Port Moody Sr. S.S.	Port Moody	9
TREADWELL	ZENEN	Preston H.S.	Cambridge	9
TU	MARIA	Richmond S.S.	Richmond	9
VO	BETTY	R.E. Mountain S.S.	Langley	9
VYTHILINGAM	VENUGA	Laurenhill Academy	Saint-Laurent	9
WALLIS	TRISTAN	College Notre-Dame	Sudbury	9
WANG	JACK	Northern S.S.	Toronto	9
WANG	JASON	St. Andrews J.H.S.	North York	9
WANG	JERRY	Agincourt C.I.	Scarborough	9
WANG	MIKE	Moscrop S.S.	Burnaby	9
WANG	QIANQIAN	Tom Baines School	Calgary	9
WANG		Moscrop S.S.	Burnaby	9
MAING	RITA	товстор в.в.	purnapy	9

Group V/Groupe V

Scores/Notes 135 - 132

WEN	CONRAD	Burnaby South S.S.	Burnaby	9
WONG	ANDREA	Yale S.S.	Abbotsford	9
WONG	CASSIDY	Markham District H.S.	Markham	9
WU	AMY	St. Margaret's School	Victoria	9
WU	JIMMY	Markham District H.S.	Markham	9
WU	KAREN	Marc Garneau C.I.	North York	9
XIAO	SCOTT	Burnaby North S.S.	Burnaby	8
XIE	ANGELYN	Markville S.S.	Markham	8
XIE	DAVE	University of Toronto Schools	Toronto	8
XIE	GARY	Semiahmoo S.S.	Surrey	9
XU	CALVIN	Vancouver Tech. S.S.	Vancouver	9
XU	JUDY	Branksome Hall	Toronto	9
XU	ROSE	Northern S.S.	Toronto	9
YAN	HEIDI	Cardinal Carter Academy	North York	9
YAN	HELENA	Pacific Academy	Surrey	9
YANG	HELEN	Colonel By S.S.	Gloucester	9
YANG	WOOSUNG	Semiahmoo S.S.	Surrey	9
YE	SHI RUI	E.S. St. Luc	Montreal	9
YIN	ANNE	Royal West Academy	Montreal-Ouest	9
YOON	MINHA	Semiahmoo S.S.	Surrey	8
YOUNG	VINCENT	Heart Lake S.S.	Brampton	9
YU	FRANK	Victoria Park C.I.	North York	9
YU	JEFF	David Thompson S.S.	Vancouver	9
ZHANG	BRUCE	Lord Byng S.S.	Vancouver	9
ZHANG	RUBY	University of Toronto Schools	Toronto	8
ZHANG	YIYI	Moscrop S.S.	Burnaby	8
ZHANG	YUC HI	St. Francis Xavier S.S.	Mississauga	9
ZHAO	INDY	Glenforest S.S.	Mississauga	9
ZHEKOV	ANTON	College St. Charles-Garnier	Quebec	9
ZHENG	KEVIN	Nelson H.S.	Burlington	9
ZHONG	RUIYING	Bayview S.S.	Richmond Hill	9
ZHOU	JAMES	Brother Andre C.H.S.	Markham	9
ZHOU	JERRY	Bayview S.S.	Richmond Hill	9
ZHOU	PETER	Danforth Coll & Tech. Inst.	Toronto	9
ZOU	TONY	Bell H.S.	Nepean	9