



School Board Report



Grade 9 Assessment of Mathematics, 2009–2010

Board: Peel District School Board (66125)

I am pleased to provide you with this report on the Grade 9 Assessment of Mathematics for 2009–2010. Included are student results for the current year and previous years, which allow school communities to track progress over time. This report also provides demographic and attitudinal information about the student populations that were assessed, in order to help put these results in context.

EQAO’s assessments measure the achievement of all students in Ontario’s publicly funded schools at important stages in their education. One of the assessments’ key strengths is the fact that they assess every student against the learning expectations outlined in *The Ontario Curriculum* and report on achievement in relation to the provincial standard. After an exhaustive review of the provincial testing program in 2009, the Auditor General of Ontario confirmed that EQAO assessments reflect curriculum expectations fairly and accurately, are consistent in difficulty from one year to the next and are administered and marked so as to ensure that their results are valid, consistent and reliable indicators of student achievement. The Auditor General’s conclusions highlight how EQAO test results help teachers and administrators to identify large-scale challenges and focus their attention where it’s needed most.

Since the inception of the provincial testing program in 1996, EQAO data have helped inform teaching practices, and they continue to serve as a catalyst for improving student achievement all across Ontario. This report is intended to help you foster constructive conversations about student achievement and assist you in the planning of improvement strategies.

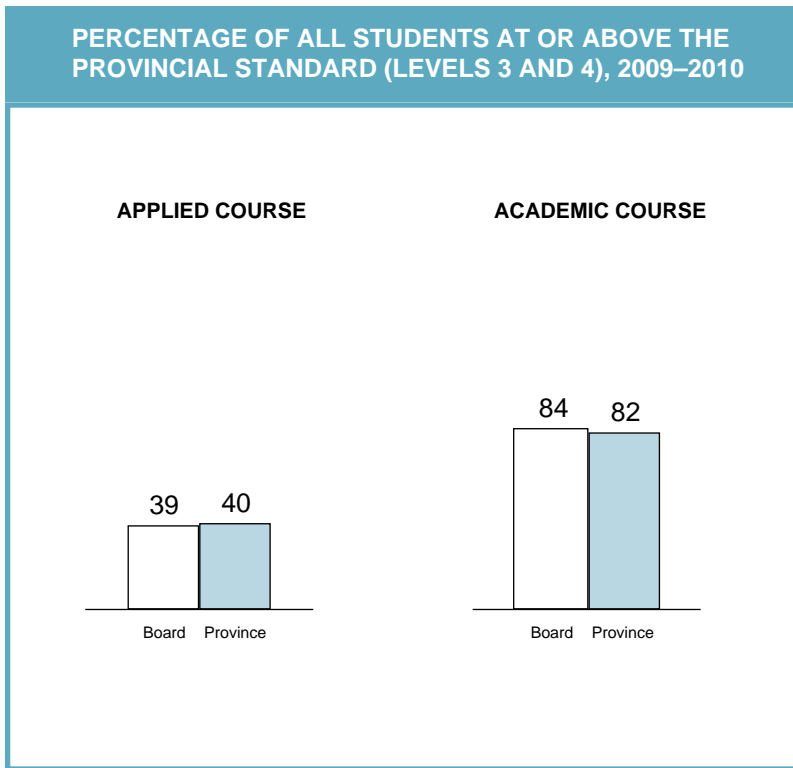
Of course, it should be remembered that EQAO’s assessment results are just one piece of information about student achievement. That is why they should be considered along with other school-based information. Regular assessments conducted in the classroom remain the fundamental method of assessing and supporting students throughout their education.

I trust that this report will help parents, educators and all who are committed to a strong public education system to work together so that all students realize their full potential.

Sincerely,

Marguerite Jackson
 Chief Executive Officer
 Education Quality and Accountability Office

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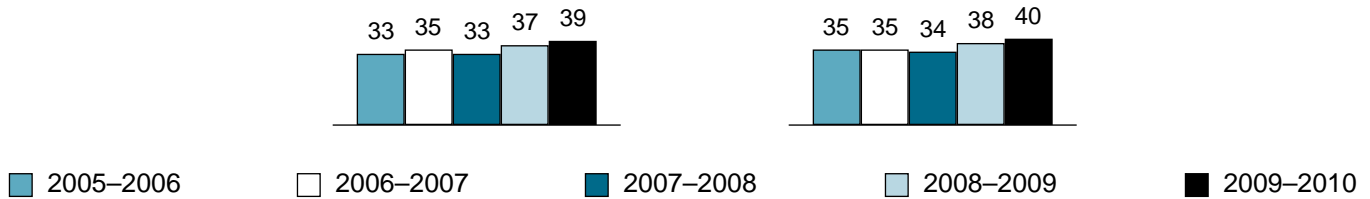
Grade 9 Assessment of Mathematics, 2009–2010

PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME

APPLIED MATHEMATICS

Board

Province



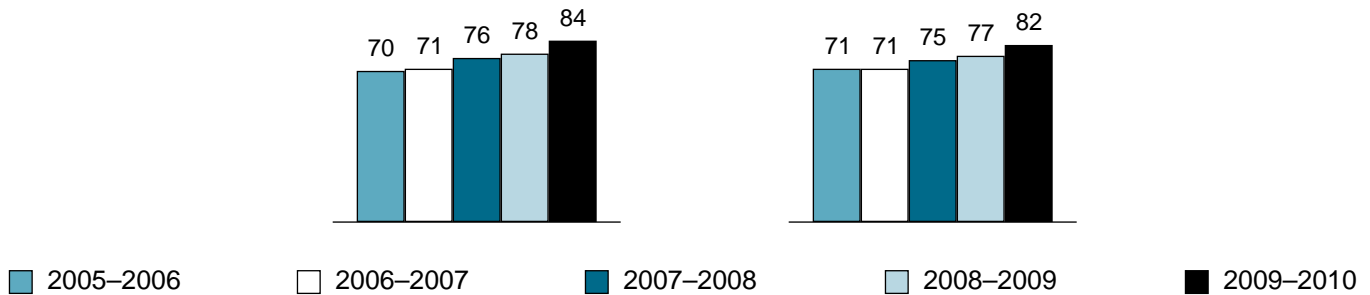
Total Number of Students

	<u>2005–2006</u>	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>	<u>2009–2010</u>
Board	2 878	2 529	2 840	2 786	2 851
Province	50 687	49 056	47 817	48 482	47 566

ACADEMIC MATHEMATICS

Board

Province



Total Number of Students

	<u>2005–2006</u>	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>	<u>2009–2010</u>
Board	7 066	7 452	7 301	7 483	7 336
Province	103 412	103 011	100 823	100 992	101 268

TIPS

The applied and academic mathematics courses are different and should be considered separately.

Note: Students in locally developed courses do not participate in these assessments.



Each school or board is unique. To appreciate the distinctive character of a school or board, look at the contextual information to understand the features and characteristics of the community it serves.



This assessment captures the performance of students at one point in time each year. Consider the results along with other information about students' achievement in mathematics.



Exercise caution when interpreting results for small schools or boards. Results may vary considerably from year to year, and differences may look exaggerated. For example, in a school of 30 students, a difference of 10% represents only three students.



Trends may be difficult to identify or to interpret. This is especially true when groups are small or in schools where there is a high turnover in the student population.



EQAO values students' privacy. Results are not reported publicly for schools where fewer than 15 students participated, because it might be possible to identify individual students.

ABOUT THIS SCHOOL OR BOARD REPORT

This report shows how well students have met curriculum expectations for either the applied or academic mathematics program to the end of Grade 9. Students complete two booklets that allow them to show what they know in mathematics. The assessment is based on *The Ontario Curriculum: Mathematics, Grades 9 and 10*.

This report includes

- ◆ results for this year;
- ◆ a comparison of results over the past four years to aid in monitoring improvement and
- ◆ information about the characteristics of the students who participated.

Specifically, you will find

- ◆ summary graphs showing the percentage of students achieving the provincial standard in either applied or academic mathematics;
- ◆ detailed tables and graphs showing results for all levels of achievement, participation information and results for gender
- ◆ student questionnaire results and
- ◆ an explanation of all terms used in this report.

HOW TO USE THIS REPORT

- ◆ Examine the contextual information to understand the similarities and differences between this school, the board and the province; the board and the province. Consider the challenges that any differences might present.
- ◆ Examine the results for applied and academic mathematics.
 - Are these results consistent with what you would expect?
 - How do the school results compare to the board and province; the board results compare to the province?
 - How do these results compare over time?
 - What influence might students' attitudes have on student performance (refer to the questionnaire results)?
- ◆ Speak to the school or board staff about the goals for school improvement related to mathematics.

The Education Quality and Accountability Office is an independent agency that gathers information about student achievement through province-wide assessments. Each year, all Grade 9 students in applied and academic mathematics take part in this assessment across Ontario. Individual results are reported to students and to parents and guardians. School, board and provincial results are released publicly.

Learn more about us at www.eqao.com.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

Contextual Information

This information provides a context for interpreting the board's applied mathematics course results.

	Board		Province	
Enrolment				
Number of students in applied mathematics course	2 851		47 566	
Number of classes with students in applied mathematics course	171		2 954	
Number of schools with applied mathematics classes	34		714	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	2 728	96%	45 063	95%
Participating students who received one or more accommodations*	633	23%	10 411	23%
Participating students who received one or more special provisions*	171	6%	1 413	3%
Students who did not complete any part of the assessment (no data)*	123	4%	2 503	5%
Gender[†] Based on number of students enrolled				
Female	1 211	42%	21 262	45%
Male	1 640	58%	26 304	55%
Gender not specified	0	0%	0	0%
Student Status[†] Based on number of students enrolled				
English language learners*	221	8%	2 857	6%
Students with special education needs (excluding gifted)*	692	24%	15 203	32%
Semester/Full Year Based on number of students enrolled				
First-semester course	1 314	46%	21 402	45%
Second-semester course	1 375	48%	21 754	46%
Full-year course	162	6%	4 410	9%
Language and School Background^{††}				
<i>Based on Student Questionnaire data</i>				
Number of Respondents:		2 594	43 201	
Speak only or mostly a language other than English at home	227	9%	2 856	7%
Speak another language as often as English at home	470	18%	5 041	12%
Attended three or more elementary schools from kindergarten to Grade 8	1 362	53%	16 886	39%

* See the Explanation of Terms.

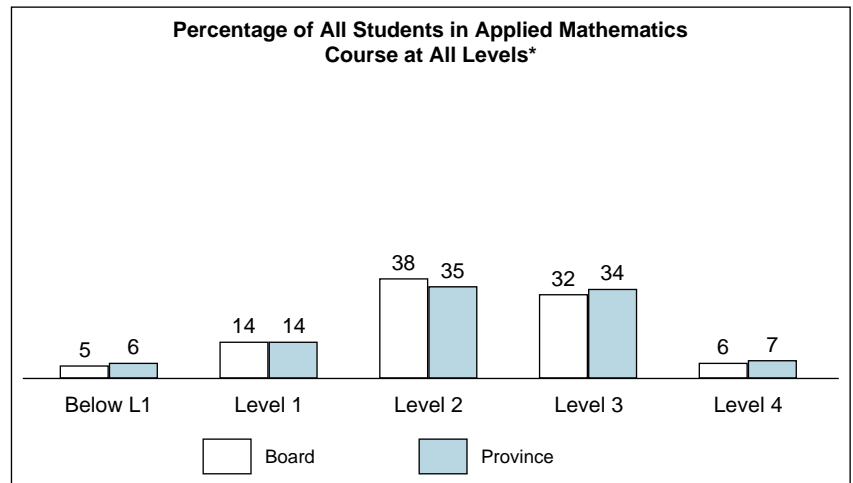
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

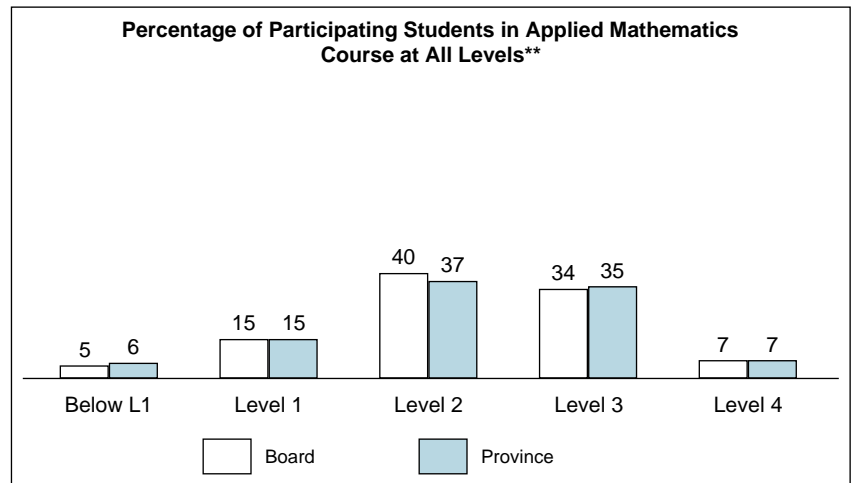
Results for All Students

All Students*			
Number of Students	Board 2 851		Province 47 566
	#	%	%
Level 4	178	6%	7%
Level 3	925	32%	34%
Level 2	1 080	38%	35%
Level 1	400	14%	14%
Below Level 1	145	5%	6%
Participating Students	2 728	96%	95%
No Data	123	4%	5%
At or Above Provincial Standard (Levels 3 and 4) †		39%	40%



Results for Participating Students (excludes "no data" category)

Participating Students**			
Number of Students	Board 2 728		Province 45 063
	#	%	%
Level 4	178	7%	7%
Level 3	925	34%	35%
Level 2	1 080	40%	37%
Level 1	400	15%	15%
Below Level 1	145	5%	6%
At or Above Provincial Standard (Levels 3 and 4) †		40%	43%



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

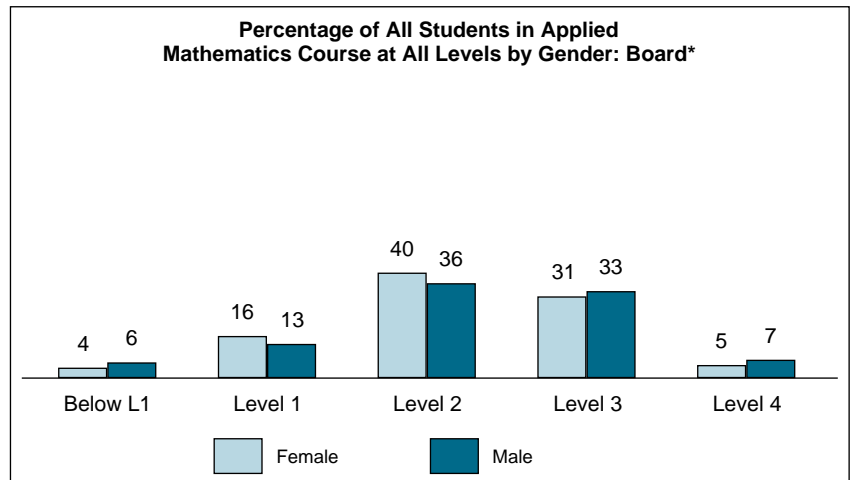
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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

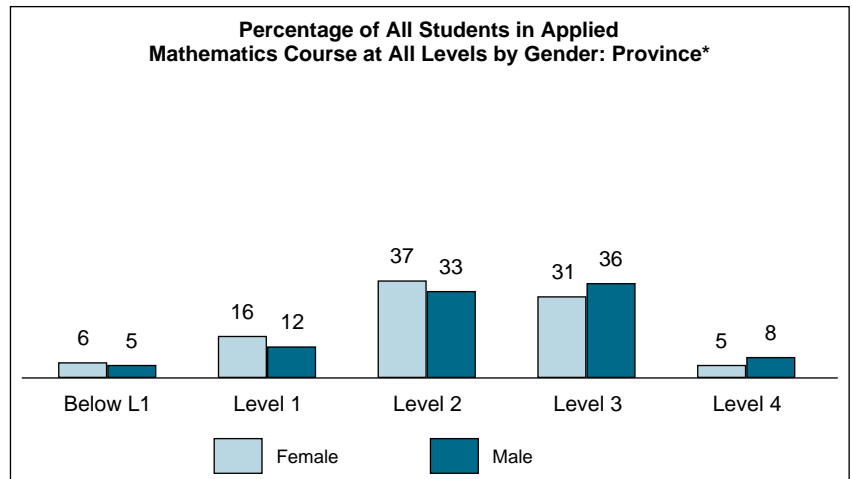
Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 1 211		Male 1 640	
	#	%	#	%
Level 4	57	5%	121	7%
Level 3	380	31%	545	33%
Level 2	486	40%	594	36%
Level 1	191	16%	209	13%
Below Level 1	54	4%	91	6%
Participating Students	1 168	96%	1 560	95%
No Data	43	4%	80	5%
At or Above Provincial Standard (Levels 3 and 4) †	36%		41%	



All Students: Province by Gender*				
Number of Students	Female 21 262		Male 26 304	
	#	%	#	%
Level 4	999	5%	2 165	8%
Level 3	6 607	31%	9 382	36%
Level 2	7 941	37%	8 688	33%
Level 1	3 431	16%	3 224	12%
Below Level 1	1 207	6%	1 419	5%
Participating Students	20 185	95%	24 878	95%
No Data	1 077	5%	1 426	5%
At or Above Provincial Standard (Levels 3 and 4) †	36%		44%	



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 † These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.
 †† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

Contextual Information

This information provides a context for interpreting the board's academic mathematics course results.

	Board		Province	
Enrolment				
Number of students in academic mathematics course	7 336		101 268	
Number of classes with students in academic mathematics course	283		4 168	
Number of schools with academic mathematics classes	30		686	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	7 282	99%	100 436	99%
Participating students who received one or more accommodations*	196	3%	3 526	4%
Participating students who received one or more special provisions*	239	3%	1 669	2%
Students who did not complete any part of the assessment (no data)*	54	1%	832	1%
Gender[†] Based on number of students enrolled				
Female	3 727	51%	51 972	51%
Male	3 609	49%	49 296	49%
Gender not specified	0	0%	0	0%
Student Status[†] Based on number of students enrolled				
English language learners*	298	4%	3 826	4%
Students with special education needs (excluding gifted)*	204	3%	5 090	5%
Semester/Full Year Based on number of students enrolled				
First-semester course	3 476	47%	44 562	44%
Second-semester course	3 447	47%	43 817	43%
Full-year course	413	6%	12 889	13%
Language and School Background^{††} Based on Student Questionnaire data				
Number of Respondents:		7 015		97 137
Speak only or mostly a language other than English at home	876	12%	8 327	9%
Speak another language as often as English at home	2 023	29%	14 612	15%
Attended three or more elementary schools from kindergarten to Grade 8	3 801	54%	32 983	34%

* See the Explanation of Terms.

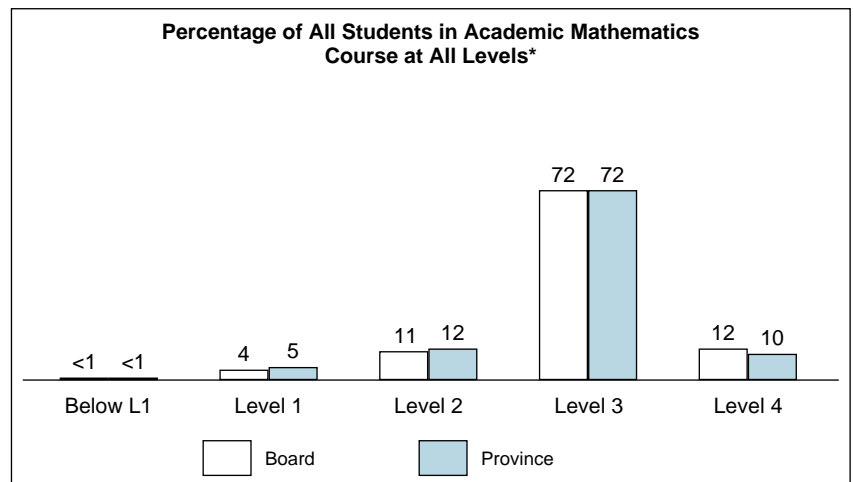
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†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

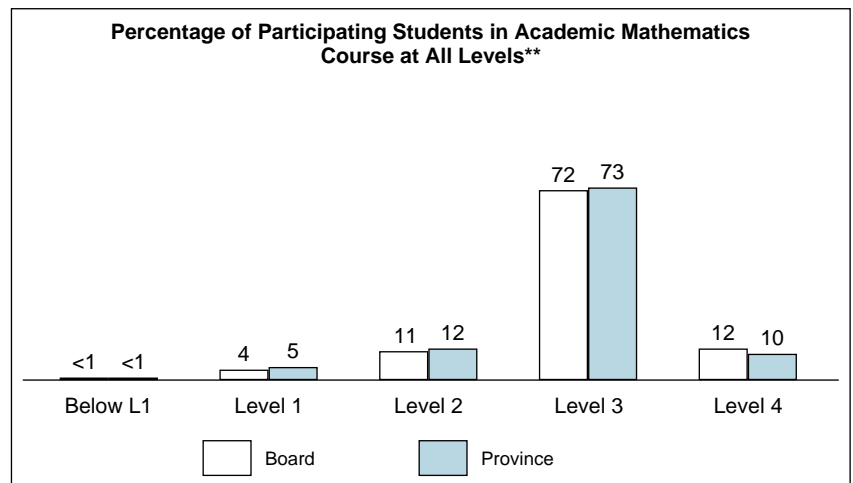
Results for All Students

All Students*			
Number of Students	Board 7 336		Province 101 268
	#	%	%
Level 4	867	12%	10%
Level 3	5 265	72%	72%
Level 2	814	11%	12%
Level 1	306	4%	5%
Below Level 1	30	<1%	<1%
Participating Students	7 282	99%	99%
No Data	54	1%	1%
At or Above Provincial Standard (Levels 3 and 4) †		84%	82%



Results for Participating Students (excludes "no data" category)

Participating Students**			
Number of Students	Board 7 282		Province 100 436
	#	%	%
Level 4	867	12%	10%
Level 3	5 265	72%	73%
Level 2	814	11%	12%
Level 1	306	4%	5%
Below Level 1	30	<1%	<1%
At or Above Provincial Standard (Levels 3 and 4) †		84%	83%



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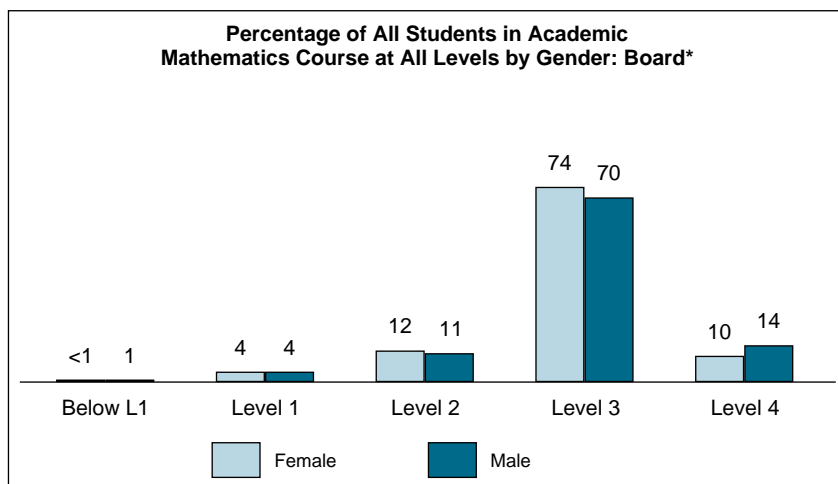
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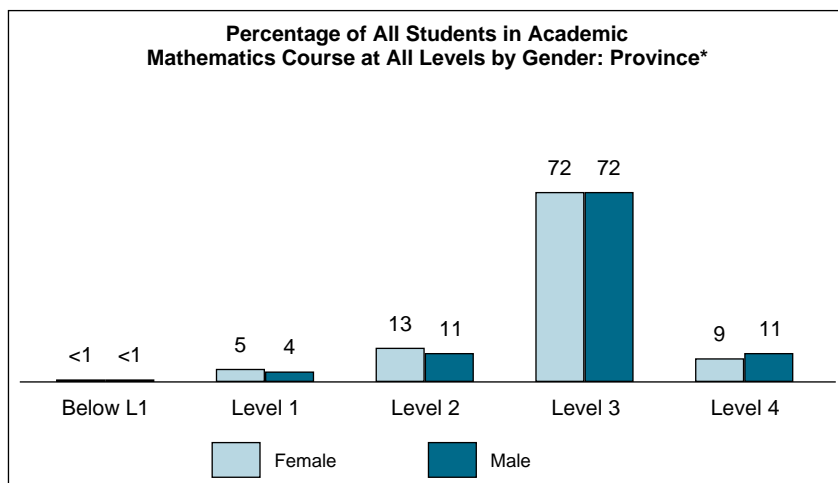
Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 3 727		Male 3 609	
	#	%	#	%
Level 4	363	10%	504	14%
Level 3	2 740	74%	2 525	70%
Level 2	429	12%	385	11%
Level 1	158	4%	148	4%
Below Level 1	11	<1%	19	1%
Participating Students	3 701	99%	3 581	99%
No Data	26	1%	28	1%
At or Above Provincial Standard (Levels 3 and 4) †	83%		84%	



All Students: Province by Gender*				
Number of Students	Female 51 972		Male 49 296	
	#	%	#	%
Level 4	4 656	9%	5 594	11%
Level 3	37 608	72%	35 440	72%
Level 2	6 725	13%	5 553	11%
Level 1	2 434	5%	2 135	4%
Below Level 1	115	<1%	176	<1%
Participating Students	51 538	99%	48 898	99%
No Data	434	1%	398	1%
At or Above Provincial Standard (Levels 3 and 4) †	81%		83%	



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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

†† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2009–2010

Contextual Information over Time: Applied Mathematics Course

This information provides a context for interpreting the board's results over the past five years.

	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	
Enrolment						
Number of students in applied mathematics course	2 878	2 529	2 840	2 786	2 851	
Number of classes with students in applied mathematics course	197	161	174	168	171	
Number of schools with applied mathematics classes	31	32	33	35	34	
Participation in the Assessment						
Students who participated in the assessment	92%	93%	93%	95%	96%	
Participating students who received one or more accommodations*	17%	22%	20%	22%	23%	
Participating students who received one or more special provisions*	8%	7%	6%	7%	6%	
Students who did not complete any part of the assessment (no data)*	6%	7%	7%	5%	4%	
Students who were exempted*	2%	--- ⁺⁺	---	---	---	
Gender[†] Based on number of students enrolled						
Female	45%	44%	44%	45%	42%	
Male	55%	56%	56%	55%	58%	
Gender not specified	0%	0%	0%	0%	0%	
Student Status[†] Based on number of students enrolled						
English language learners*	12%	10%	8%	8%	8%	
Students with special education needs (excluding gifted)*	23%	24%	23%	23%	24%	
Semester/Full Year Based on number of students enrolled						
First-semester course	47%	41%	47%	47%	46%	
Second-semester course	42%	49%	46%	45%	48%	
Full-year course	11%	10%	7%	8%	6%	
Language and School Background^{††} Based on Student Questionnaire data						
	Number of Respondents:	n/a	2 241	2 538	2 535	2 594
Speak only or mostly a language other than English at home			11%	10%	9%	9%
Speak another language as often as English at home	Information not available		17%	19%	19%	18%
Attended three or more elementary schools from kindergarten to Grade 8			55%	57%	57%	53%

* See the Explanation of Terms.

† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

⁺⁺ Beginning in 2006–2007, exemptions have not been permitted.

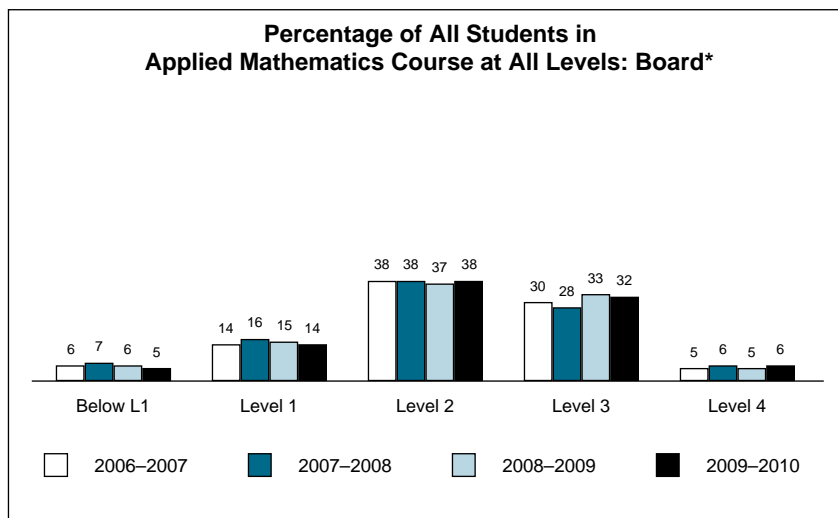
†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

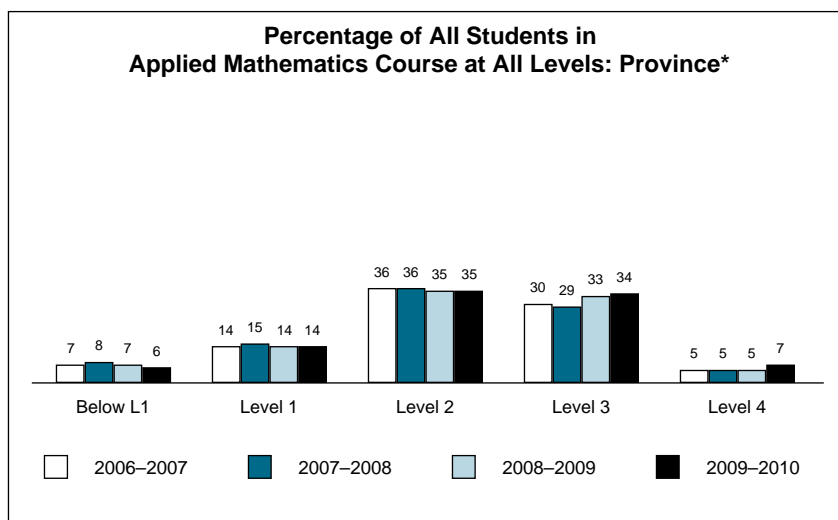
Results over Time, 2006–2007 to 2009–2010

Applied Mathematics Course for All Students

Board*				
Year	'06-'07	'07-'08	'08-'09	'09-'10
<i>Number of Students</i>	2 529	2 840	2 786	2 851
Level 4	5%	6%	5%	6%
Level 3	30%	28%	33%	32%
Level 2	38%	38%	37%	38%
Level 1	14%	16%	15%	14%
Below Level 1	6%	7%	6%	5%
<i>Participating Students</i>	93%	93%	95%	96%
No Data	7%	7%	5%	4%
At or Above Provincial Standard (Levels 3 and 4)†	35%	33%	37%	39%



Province*				
Year	'06-'07	'07-'08	'08-'09	'09-'10
<i>Number of Students</i>	49 056	47 817	48 482	47 566
Level 4	5%	5%	5%	7%
Level 3	30%	29%	33%	34%
Level 2	36%	36%	35%	35%
Level 1	14%	15%	14%	14%
Below Level 1	7%	8%	7%	6%
<i>Participating Students</i>	91%	93%	94%	95%
No Data	9%	7%	6%	5%
At or Above Provincial Standard (Levels 3 and 4)†	35%	34%	38%	40%



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

Grade 9 Assessment of Mathematics, 2009–2010

Contextual Information over Time: Academic Mathematics Course

This information provides a context for interpreting the board's results over the past five years.

	2005–2006	2006–2007	2007–2008	2008–2009	2009–2010	
Enrolment						
Number of students in academic mathematics course	7 066	7 452	7 301	7 483	7 336	
Number of classes with students in academic mathematics course	290	297	291	293	283	
Number of schools with academic mathematics classes	27	29	30	30	30	
Participation in the Assessment						
Students who participated in the assessment	99%	99%	100%	99%	99%	
Participating students who received one or more accommodations*	2%	2%	2%	3%	3%	
Participating students who received one or more special provisions*	3%	4%	3%	3%	3%	
Students who did not complete any part of the assessment (no data)*	1%	1%	<1%	1%	1%	
Students who were exempted*	<1%	---**	---	---	---	
Gender[†] Based on number of students enrolled						
Female	50%	50%	49%	49%	51%	
Male	50%	50%	51%	51%	49%	
Gender not specified	0%	0%	0%	0%	0%	
Student Status[†] Based on number of students enrolled						
English language learners*	5%	5%	4%	4%	4%	
Students with special education needs (excluding gifted)*	3%	3%	3%	3%	3%	
Semester/Full Year Based on number of students enrolled						
First-semester course	46%	45%	46%	48%	47%	
Second-semester course	45%	45%	47%	47%	47%	
Full-year course	10%	10%	7%	6%	6%	
Language and School Background^{††} Based on Student Questionnaire data						
	Number of Respondents:	n/a	7 172	7 073	7 226	7 015
Speak only or mostly a language other than English at home			13%	13%	13%	12%
Speak another language as often as English at home	Information not available		24%	26%	27%	29%
Attended three or more elementary schools from kindergarten to Grade 8			55%	58%	55%	54%

* See the Explanation of Terms.

† Contextual data pertaining to “gender” and “student status” are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

** Beginning in 2006–2007, exemptions have not been permitted.

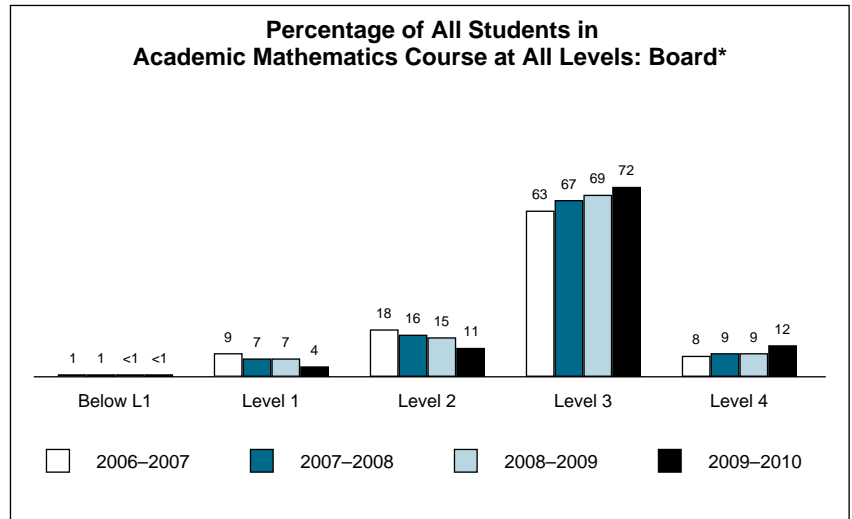
†† Contextual data pertaining to “school background” and “language” are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

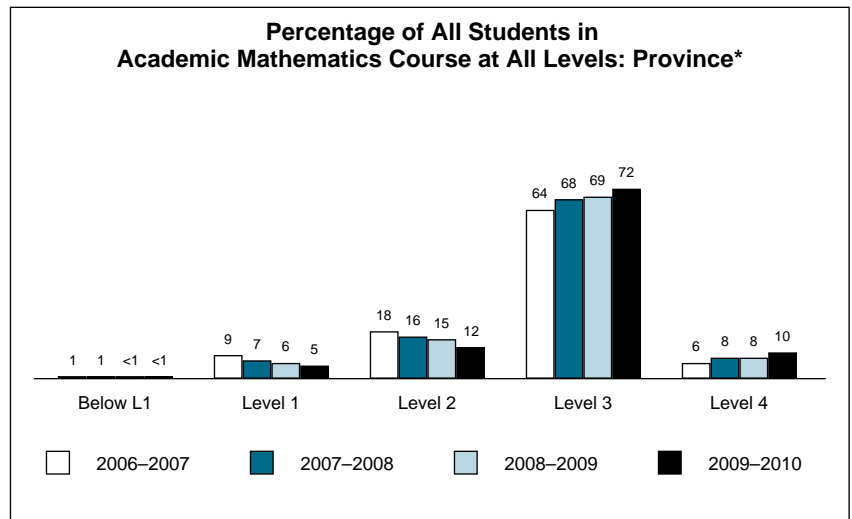
Results over Time, 2006–2007 to 2009–2010

Academic Mathematics Course for All Students

Board*				
Year	'06-'07	'07-'08	'08-'09	'09-'10
<i>Number of Students</i>	7 452	7 301	7 483	7 336
Level 4	8%	9%	9%	12%
Level 3	63%	67%	69%	72%
Level 2	18%	16%	15%	11%
Level 1	9%	7%	7%	4%
Below Level 1	1%	1%	<1%	<1%
<i>Participating Students</i>	99%	100%	99%	99%
No Data	1%	<1%	1%	1%
At or Above Provincial Standard (Levels 3 and 4)†	71%	76%	78%	84%



Province*				
Year	'06-'07	'07-'08	'08-'09	'09-'10
<i>Number of Students</i>	103 011	100 823	100 992	101 268
Level 4	6%	8%	8%	10%
Level 3	64%	68%	69%	72%
Level 2	18%	16%	15%	12%
Level 1	9%	7%	6%	5%
Below Level 1	1%	1%	<1%	<1%
<i>Participating Students</i>	98%	99%	99%	99%
No Data	2%	1%	1%	1%
At or Above Provincial Standard (Levels 3 and 4)†	71%	75%	77%	82%

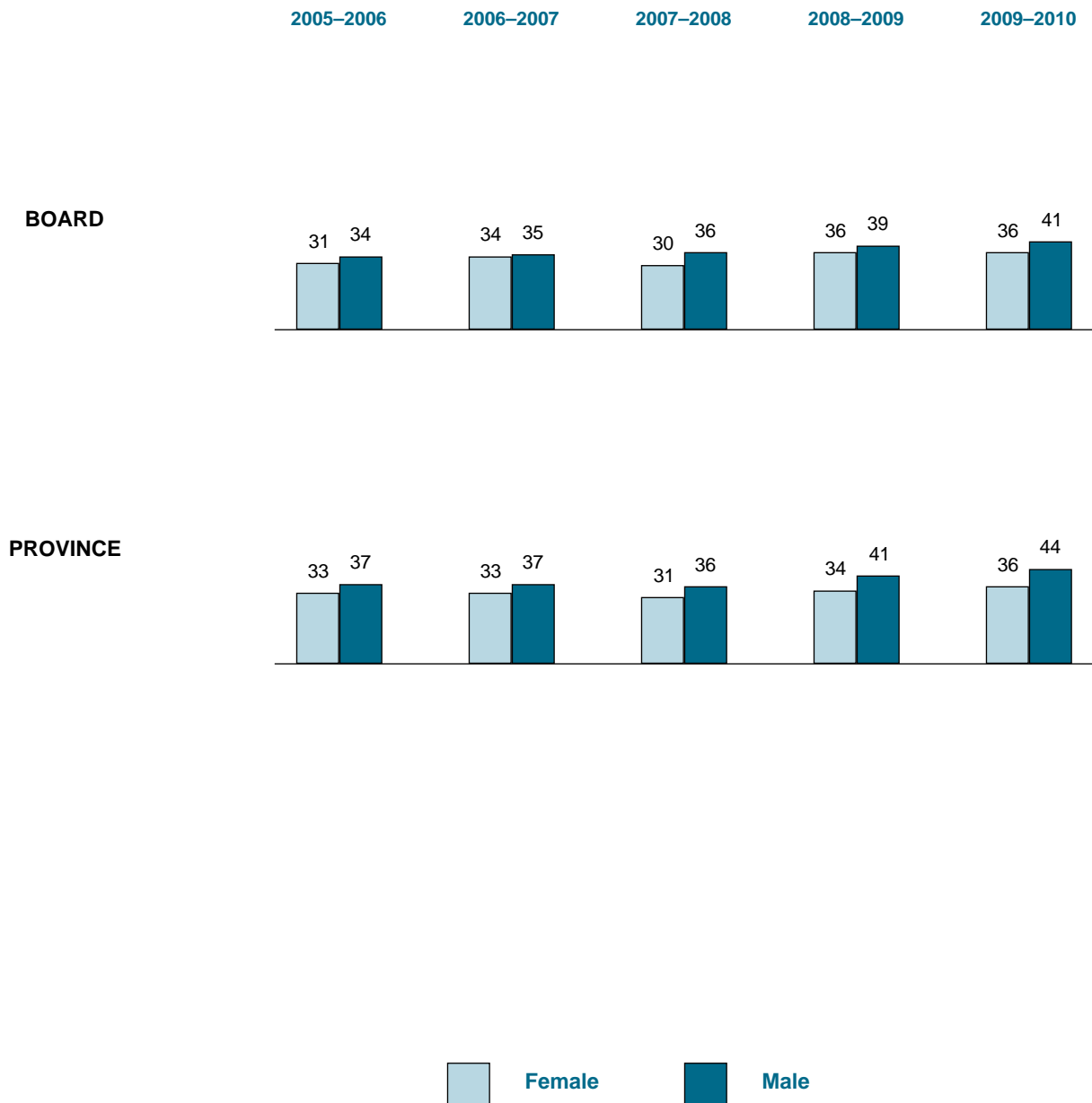


* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER†

**Percentage of Students At or Above the Provincial Standard (Levels 3 and 4):
GRADE 9 APPLIED MATHEMATICS**



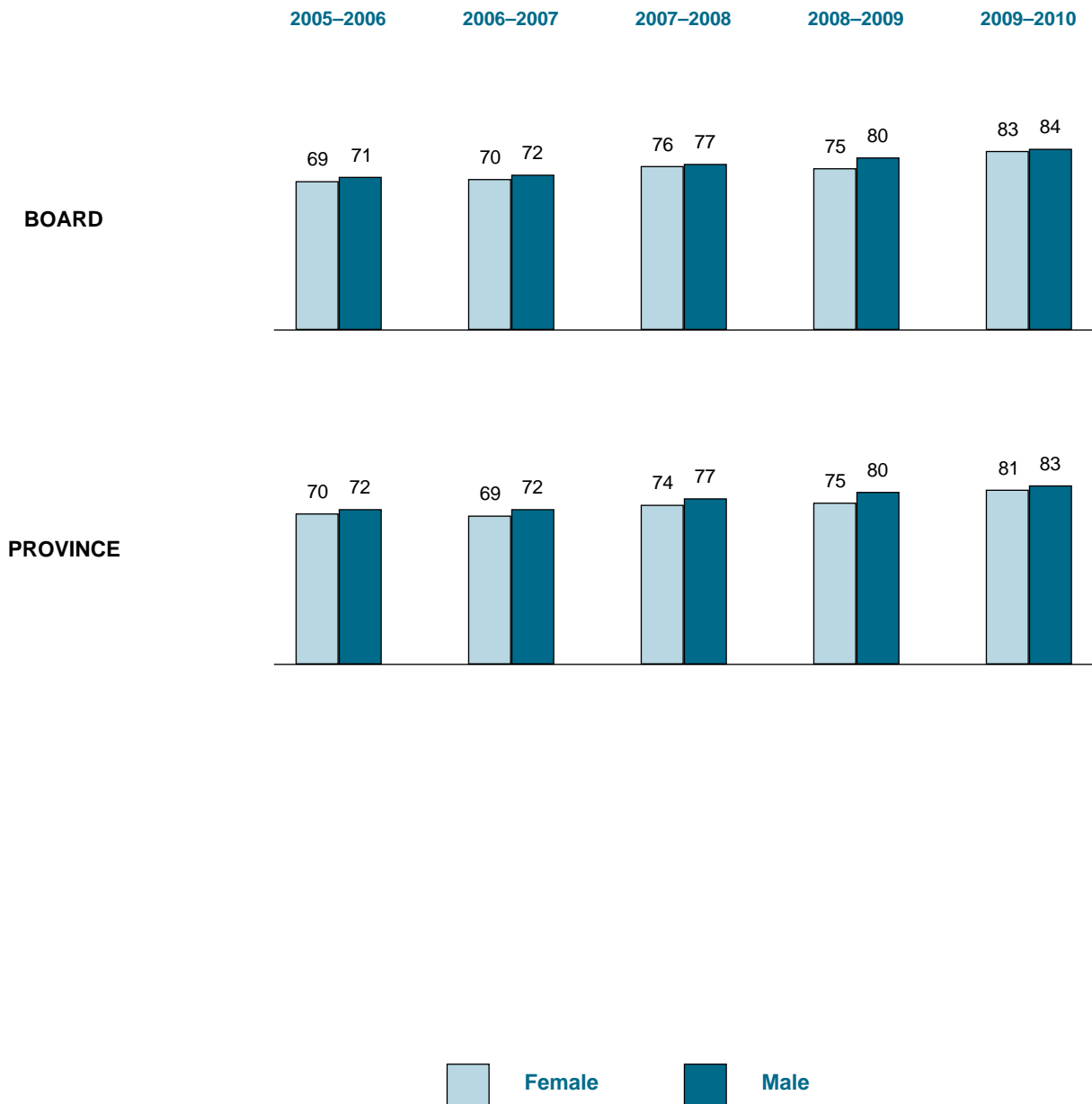
Total Number of Students in Applied Mathematics Course†

	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	1 287	1 591	1 106	1 423	1 249	1 591	1 263	1 523	1 211	1 640
Province	22 884	27 802	22 126	26 926	21 626	26 182	21 752	26 730	21 262	26 304

† Includes only students for whom gender data were available.

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER†

**Percentage of Students At or Above the Provincial Standard (Levels 3 and 4):
GRADE 9 ACADEMIC MATHEMATICS**

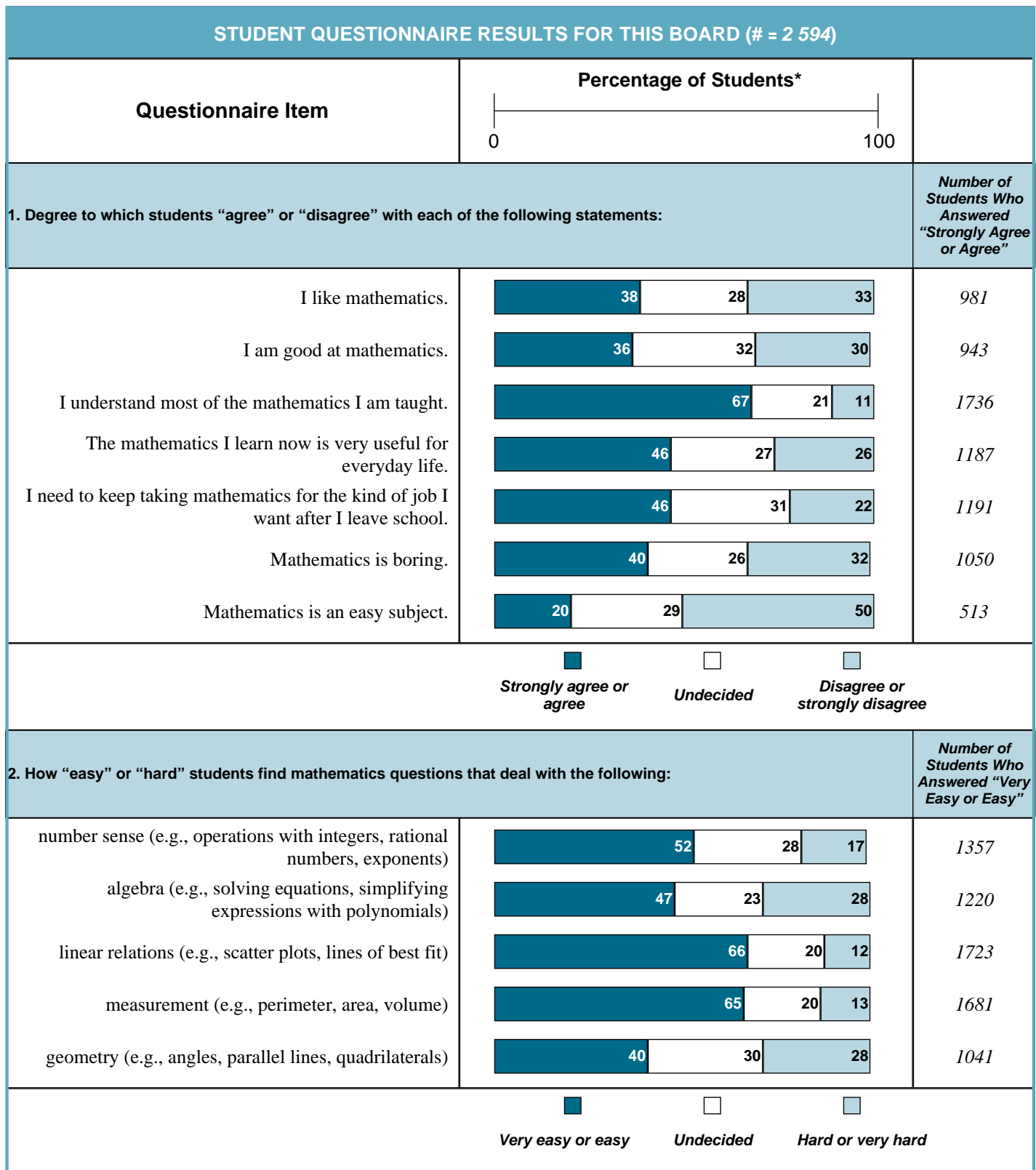


Total Number of Students in Academic Mathematics Course†

	2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	3 553	3 513	3 744	3 708	3 584	3 717	3 683	3 800	3 727	3 609
Province	53 183	50 228	52 887	50 122	51 367	49 452	51 554	49 438	51 972	49 296

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course



* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 594)		
Questionnaire Item	Percentage of Students*	
3. Students have the following <i>at home</i> to use for mathematics school work:		Number of Students Who Answered "Yes"
a computer		1430
a scientific calculator		1995
a graphing calculator		255
<p style="text-align: center;"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </p>		
4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day:		Number of Students
more than 45 minutes		398
between 31 and 45 minutes		655
30 minutes or less		1109
mathematics homework not usually assigned		393
5. How often students complete all of their mathematics homework:		Number of Students
never or seldom		389
sometimes		824
often or always		1335
6. How often students have been absent from their Grade 9 mathematics class this year:		Number of Students
never		346
one to four times		1192
five to nine times		571
10 or more times		445

* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 594)		
Questionnaire Item	Percentage of Students*	
7. How often students have been late for their Grade 9 mathematics class this year:		Number of Students
never	26	672
one to four times	38	975
five to nine times	16	418
10 or more times	19	488
8. Language(s) students speak at home:		Number of Students
only or mostly English	72	1861
another language (or other languages) as often as English	18	470
only or mostly another language (or other languages)	9	227
9. Number of elementary schools (kindergarten to Grade 8) attended:		Number of Students
one or two schools	46	1182
three schools	25	655
four schools	14	369
five schools or more	13	338

* Percentages may not add to 100, due to a lack of or ambiguous responses.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 594)		
Questionnaire Item	Percentage of Students*	
10. Teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of students' class mark:		Number of Students
yes	37	963
no	4	92
don't know	56	1465
11. a) Students were told how much the assessment will count as part of their class mark:†		Number of Students
yes	87	840
no	12	117
11. b) If yes, it will count for:†		Number of Students
1–5%	21	173
6–10%	45	378
11–15%	8	68
16–20%	2	15
21–25%	2	20
26–30%	7	59
other	2	16
don't know	12	100
12. Counting the Grade 9 Assessment of Mathematics as part of class mark motivates student to take the assessment more seriously:†		Number of Students
yes	73	699
no	11	107
undecided	14	138

* Percentages may not add to 100, due to a lack of or ambiguous responses.

† Numbers and percentages for Questions 11. a) and 12 are based on the number of students who answered 'yes' to Question 10. Note: Numbers and percentages for Question 11. b) are further based on the number of students who answered 'yes' to Question 11. a).

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 594)	Female* (# = 1 127)	Male* (# = 1 467)	All Students (# = 43 201)	Female* (# = 19 459)	Male* (# = 23 742)
Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:						
I like mathematics.	38%	30%	44%	37%	30%	43%
I am good at mathematics.	36%	27%	44%	37%	28%	44%
I understand most of the mathematics I am taught.	67%	65%	68%	64%	60%	68%
The mathematics I learn now is very useful for everyday life.	46%	44%	47%	41%	38%	44%
I need to keep taking mathematics for the kind of job I want after I leave school.	46%	43%	48%	43%	40%	46%
Mathematics is boring.	40%	42%	39%	43%	45%	41%
Mathematics is an easy subject.	20%	14%	24%	22%	17%	27%
Percentage of students indicating that the following are “very easy” or “easy”:						
number sense	52%	47%	56%	49%	46%	52%
algebra	47%	48%	47%	44%	45%	44%
linear relations	66%	67%	66%	66%	65%	67%
measurement	65%	66%	64%	67%	67%	68%
geometry	40%	39%	41%	42%	37%	46%
Percentage of students indicating they have the following at home to use for mathematics school work:						
a computer	55%	57%	54%	46%	48%	44%
a scientific calculator	77%	80%	75%	75%	79%	73%
a graphing calculator	10%	9%	10%	10%	9%	11%
Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:†						
30 minutes or less	43%	40%	45%	44%	43%	45%
more than 30 minutes	41%	45%	38%	34%	37%	31%
mathematics homework not usually assigned	15%	15%	15%	21%	19%	22%
Percentage of students indicating they complete all of their mathematics homework†						
never or seldom.	15%	12%	18%	16%	13%	18%
sometimes.	32%	32%	32%	32%	31%	32%
often or always.	51%	55%	48%	51%	55%	48%
Percentage of students indicating they have been absent from their mathematics class this year†						
four times or less.	59%	57%	61%	59%	57%	60%
five times or more.	39%	42%	37%	40%	42%	38%
Percentage of students indicating how often they have been late for their mathematics class this year†						
four times or less.	63%	64%	63%	70%	70%	69%
five times or more.	35%	35%	35%	29%	28%	29%
Percentage of students indicating that they speak the following language(s) at home:†						
only or mostly English	72%	73%	70%	81%	81%	81%
another language (or other languages) as often as English	18%	18%	18%	12%	12%	11%
only or mostly another language (or other languages)	9%	7%	10%	7%	6%	7%
Percentage of students indicating that from kindergarten to Grade 8 they attended						
three or more elementary schools.	53%	52%	53%	39%	41%	38%

* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to a lack of or ambiguous responses.

Grade 9 Assessment of Mathematics, 2009–2010, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 594)	Female* (# = 1 127)	Male* (# = 1 467)	All Students (# = 43 201)	Female* (# = 19 459)	Male* (# = 23 742)
Percentage of students indicating teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark:†						
yes	37%	39%	35%	38%	39%	37%
no	4%	3%	4%	3%	2%	4%
don't know	56%	55%	57%	57%	56%	57%
Percentage of students indicating they were told how much the assessment will count as part of their class mark:†‡						
yes	87%	88%	87%	86%	87%	86%
no	12%	12%	12%	12%	12%	13%
Percentage of students indicating how much the assessment will count as part of their class mark:‡§						
1–5%	21%	20%	21%	26%	27%	25%
6–10%	45%	44%	46%	35%	35%	34%
11–15%	8%	9%	8%	16%	15%	17%
16–20%	2%	2%	2%	3%	3%	3%
21–25%	2%	4%	1%	2%	2%	2%
26–30%	7%	7%	7%	4%	4%	4%
other	2%	2%	2%	1%	1%	2%
don't know	12%	12%	12%	12%	12%	11%
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously:†‡						
yes	73%	74%	71%	69%	71%	67%
no	11%	9%	13%	13%	10%	15%
undecided	14%	15%	13%	17%	17%	16%

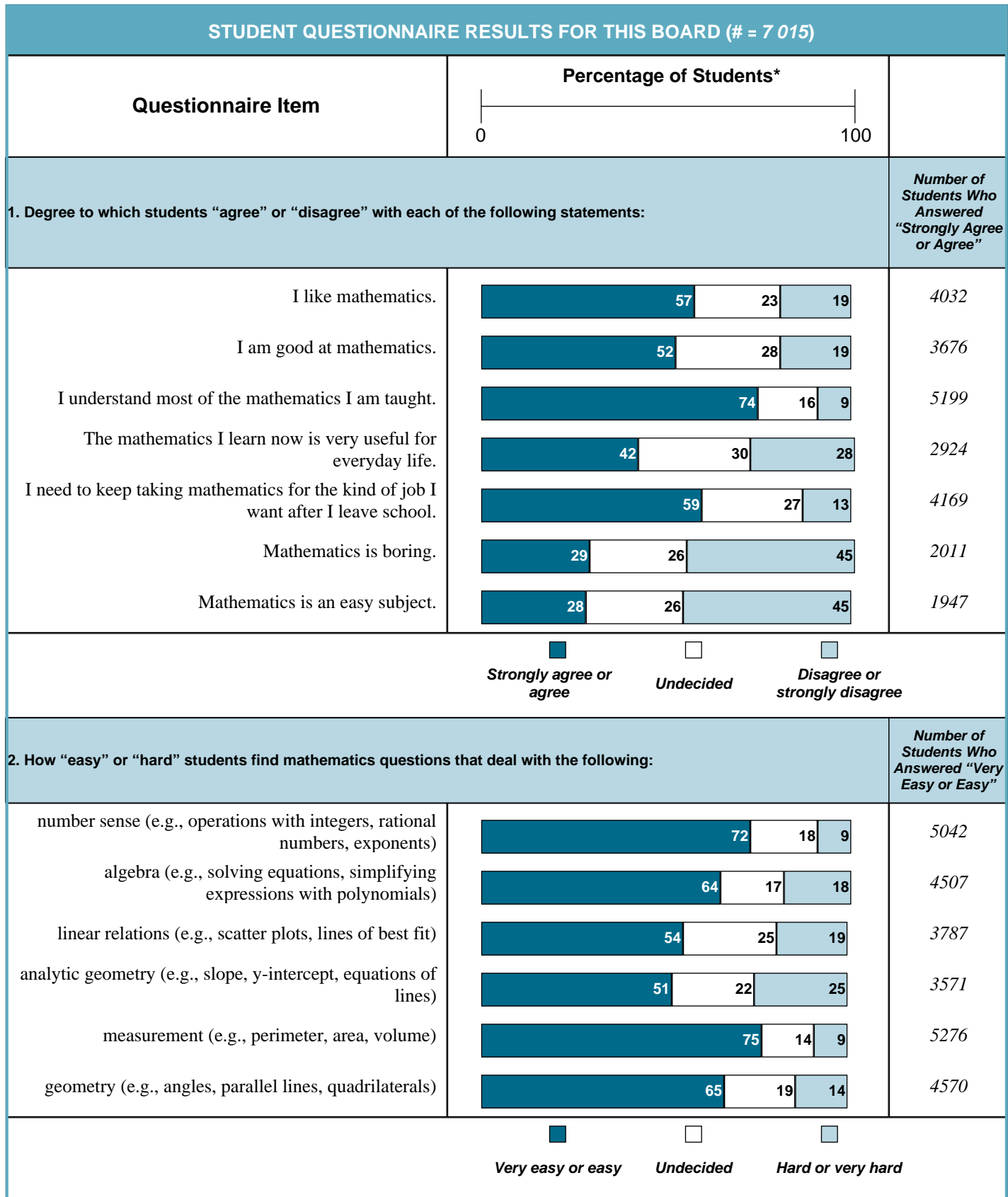
* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to a lack of or ambiguous responses.

‡ Percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

§ Percentages of students are based on the number of students who indicated that they were told how much the assessment will count as part of their class mark.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course



* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 015)		
Questionnaire Item	Percentage of Students*	
3. Students have the following <i>at home</i> to use for mathematics school work:		Number of Students Who Answered "Yes"
a computer		5052
a scientific calculator		6318
a graphing calculator		808
<p style="text-align: center;"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </p>		
4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day:		Number of Students
more than 45 minutes		2035
between 31 and 45 minutes		2510
30 minutes or less		2180
mathematics homework not usually assigned		162
5. How often students complete all of their mathematics homework:		Number of Students
never or seldom		802
sometimes		1591
often or always		4486
6. How often students have been absent from their Grade 9 mathematics class this year:		Number of Students
never		1215
one to four times		4183
five to nine times		990
10 or more times		458

* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 015)		
Questionnaire Item	Percentage of Students*	
7. How often students have been late for their Grade 9 mathematics class this year:		Number of Students
never		2971
one to four times		2749
five to nine times		719
10 or more times		397
8. Language(s) students speak at home:		Number of Students
only or mostly English		3981
another language (or other languages) as often as English		2023
only or mostly another language (or other languages)		876
9. Number of elementary schools (kindergarten to Grade 8) attended:		Number of Students
one or two schools		3021
three schools		1895
four schools		1060
five schools or more		846

* Percentages may not add to 100, due to a lack of or ambiguous responses.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 015)		
Questionnaire Item	Percentage of Students*	
10. Teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of students' class mark:		Number of Students
yes	61	4307
no	2	132
don't know	33	2285
11. a) Students were told how much the assessment will count as part of their class mark:†		Number of Students
yes	91	3926
no	8	352
11. b) If yes, it will count for:†		Number of Students
1–5%	40	1583
6–10%	44	1713
11–15%	3	134
16–20%	1	36
21–25%	1	53
26–30%	2	62
other	1	32
don't know	7	271
12. Counting the Grade 9 Assessment of Mathematics as part of class mark motivates student to take the assessment more seriously:†		Number of Students
yes	73	3164
no	12	528
undecided	13	545

* Percentages may not add to 100, due to a lack of or ambiguous responses.

† Numbers and percentages for Questions 11. a) and 12 are based on the number of students who answered 'yes' to Question 10. Note: Numbers and percentages for Question 11. b) are further based on the number of students who answered 'yes' to Question 11. a).

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 7 015)	Female* (# = 3 573)	Male* (# = 3 442)	All Students (# = 97 137)	Female* (# = 50 038)	Male* (# = 47 099)
Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:						
I like mathematics.	57%	52%	64%	55%	49%	61%
I am good at mathematics.	52%	45%	60%	53%	46%	61%
I understand most of the mathematics I am taught.	74%	72%	76%	73%	70%	76%
The mathematics I learn now is very useful for everyday life.	42%	37%	46%	36%	31%	40%
I need to keep taking mathematics for the kind of job I want after I leave school.	59%	55%	64%	56%	53%	59%
Mathematics is boring.	29%	29%	28%	31%	31%	30%
Mathematics is an easy subject.	28%	22%	34%	28%	23%	34%
Percentage of students indicating that the following are “very easy” or “easy”:						
number sense	72%	69%	75%	69%	66%	73%
algebra	64%	65%	64%	63%	63%	62%
linear relations	54%	50%	58%	52%	48%	56%
analytic geometry	51%	48%	53%	50%	47%	52%
measurement	75%	73%	77%	77%	76%	79%
geometry	65%	63%	67%	65%	62%	68%
Percentage of students indicating they have the following at home to use for mathematics school work:						
a computer	72%	74%	70%	59%	62%	57%
a scientific calculator	90%	91%	89%	88%	90%	86%
a graphing calculator	12%	10%	13%	9%	8%	10%
Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:†						
30 minutes or less	31%	25%	37%	37%	31%	43%
more than 30 minutes	65%	71%	58%	59%	66%	52%
mathematics homework not usually assigned	2%	2%	3%	3%	2%	4%
Percentage of students indicating they complete all of their mathematics homework†						
never or seldom.	11%	8%	15%	12%	9%	16%
sometimes.	23%	20%	26%	24%	22%	26%
often or always.	64%	70%	58%	62%	68%	56%
Percentage of students indicating they have been absent from their mathematics class this year†						
four times or less.	77%	76%	78%	72%	71%	73%
five times or more.	21%	21%	20%	27%	28%	25%
Percentage of students indicating how often they have been late for their mathematics class this year†						
four times or less.	82%	84%	79%	85%	87%	83%
five times or more.	16%	14%	18%	14%	12%	15%
Percentage of students indicating that they speak the following language(s) at home:†						
only or mostly English	57%	59%	55%	75%	76%	74%
another language (or other languages) as often as English	29%	29%	29%	15%	15%	15%
only or mostly another language (or other languages)	12%	10%	15%	9%	7%	10%
Percentage of students indicating that from kindergarten to Grade 8 they attended						
three or more elementary schools.	54%	55%	53%	34%	34%	33%

* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to a lack of or ambiguous responses.

Grade 9 Assessment of Mathematics, 2009–2010, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 7 015)	Female* (# = 3 573)	Male* (# = 3 442)	All Students (# = 97 137)	Female* (# = 50 038)	Male* (# = 47 099)
Percentage of students indicating teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark:†						
yes	61%	63%	59%	64%	66%	62%
no	2%	1%	2%	2%	1%	2%
don't know	33%	31%	34%	31%	29%	32%
Percentage of students indicating they were told how much the assessment will count as part of their class mark:†‡						
yes	91%	92%	91%	91%	92%	91%
no	8%	8%	9%	8%	8%	8%
Percentage of students indicating how much the assessment will count as part of their class mark:‡§						
1–5%	40%	42%	39%	32%	33%	32%
6–10%	44%	42%	45%	43%	43%	44%
11–15%	3%	3%	3%	11%	11%	12%
16–20%	1%	1%	1%	3%	3%	2%
21–25%	1%	2%	1%	1%	1%	1%
26–30%	2%	1%	2%	2%	2%	2%
other	1%	1%	1%	1%	<1%	1%
don't know	7%	7%	7%	6%	7%	6%
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously:†‡						
yes	73%	76%	70%	72%	74%	69%
no	12%	10%	15%	13%	11%	17%
undecided	13%	12%	13%	13%	14%	13%

* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to a lack of or ambiguous responses.

‡ Percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

§ Percentages of students are based on the number of students who indicated that they were told how much the assessment will count as part of their class mark.

Grade 9 Assessment of Mathematics, 2009–2010

EXPLANATION OF TERMS

All Students	Results are reported for all students in the course.
Participating Students	Results are reported only for those students who took part in the assessment (excludes the "no data" category).
Provincial Standard	The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard.
Level 4 (80–100%)	The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard.
Level 3 (70–79%)	The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard.
Level 2 (60–69%)	The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching</i> , the provincial standard.
Level 1 (50–59%)	The student has demonstrated a passable level of achievement. Achievement is <i>below</i> the provincial standard.
Below Level 1/ Below L1	The student has not demonstrated sufficient achievement of curriculum expectations (below 50%).
No Data	Students who did not complete any part of the assessment due to absence or for medical or other reasons.
Exempt	Beginning in 2006–2007, exemptions have not been permitted.
English Language Learners	Students who have been identified by the school in accordance with <i>English Language Learners: ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12</i> (2007). Prior to 2007, English language learners were called English as a second language (ESL)/English literacy development (ELD) learners.
Students Receiving One or More Special Provisions	Students identified by the school as receiving special provisions. Detailed information about special provisions is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> .
Students with Special Education Needs (excluding gifted)	Students who have been formally identified by an Identification, Placement and Review Committee, as well as students who have an Individual Education Plan. Students identified as gifted are not included.
Students Receiving One or More Accommodations	Students identified by the school as receiving accommodations. Detailed information about accommodations is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> .
N/R	"Not reported" indicates that the number of students participating (fewer than 15 in a group) or responding to the Student Questionnaire is so small (fewer than six in a group) that identification of individual student results might be possible; therefore, results are not reported.
N/D	"No data available" is used to indicate that there were no students in the course for the years specified.
W	Results for some or all students are being withheld by EQAO. For further information, please contact personnel at the board.