



# School Board Report



## Grade 9 Assessment of Mathematics, 2008–2009

### Board: Peel District School Board (66125)

I am pleased to provide you with this report on the Grade 9 Assessment of Mathematics for 2008–2009. Included are student results for the current year, those from previous years and, to put these results in context, information about the local student populations.

Throughout the province and since the inception of the agency, EQAO results have helped inform professional practice and have served as a catalyst for improving student achievement. This report has been designed to assist you in your conversations about improved student learning.

We believe that every student deserves the best outcome from public education. That’s why, in close collaboration with Ontario educators, EQAO continues to develop assessments that gauge the achievement of all Ontario students against the learning expectations outlined in *The Ontario Curriculum*. These assessments ensure that every student in Ontario’s publicly funded school system is assessed using the same yard stick at key stages in his or her schooling.

However, it should be remembered that EQAO’s assessment results are just one piece of information about student achievement. These results should be considered in conjunction with school-based information, such as that from classroom assessments.

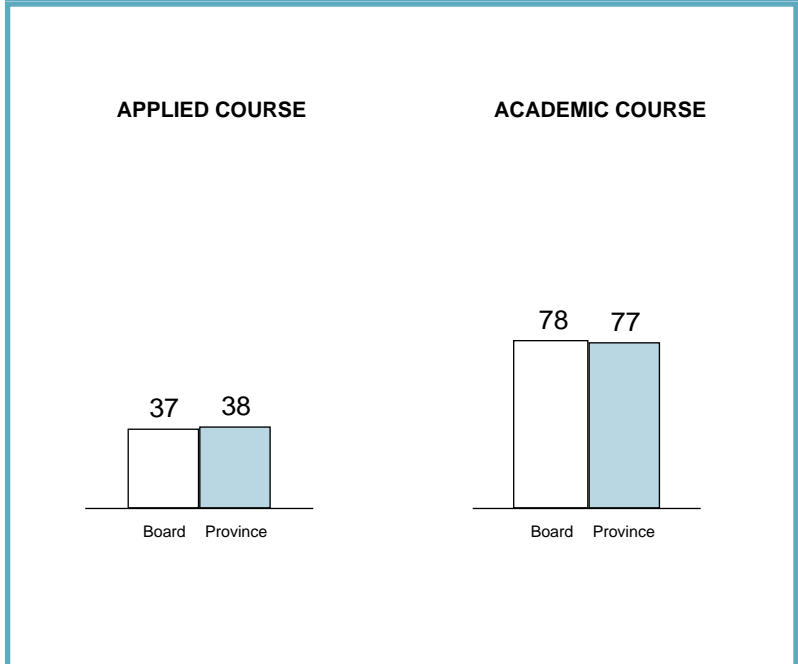
I trust this report will help parents, educators and all who support a strong public education system work together so that all students can reach their full potential.

Sincerely,

Marguerite Jackson  
 Chief Executive Officer  
 Education Quality and Accountability Office

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### PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4), 2008–2009



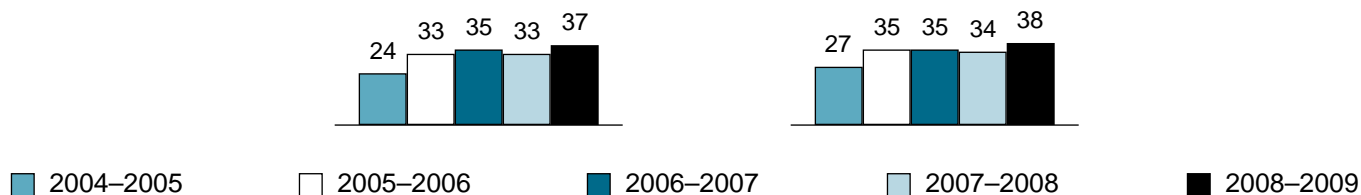
Grade 9 Assessment of Mathematics, 2008–2009

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

APPLIED MATHEMATICS\*

Board

Province



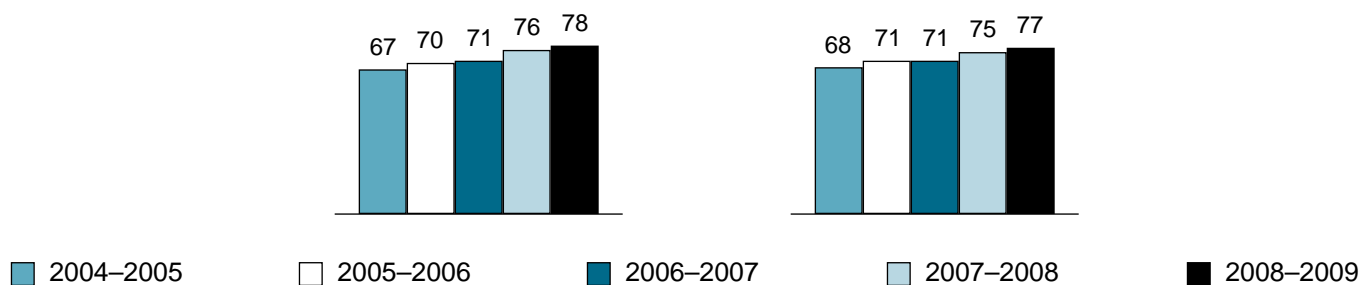
	Total Number of Students				
	<u>2004–2005</u>	<u>2005–2006</u>	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>
Board	2 883	2 878	2 529	2 840	2 786
Province	51 155	50 687	49 056	47 817	48 482

\* Note that significant revisions were made to applied courses in 2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

ACADEMIC MATHEMATICS

Board

Province



	Total Number of Students				
	<u>2004–2005</u>	<u>2005–2006</u>	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>
Board	6 995	7 066	7 452	7 301	7 483
Province	104 100	103 412	103 011	100 823	100 992

## 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? Note that significant revisions were made to applied courses in 2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).
  - 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](http://www.eqao.com).

## Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

**Contextual Information**

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

	Board		Province	
<b>Enrolment</b>				
Number of students in applied mathematics course	2 786		48 482	
Number of classes with students in applied mathematics course	168		2 950	
Number of schools with applied mathematics classes	35		715	
<b>Number Percent Number Percent</b>				
<b>Participation in the Assessment</b>				
Students who participated in the assessment	2 655	95%	45 616	94%
Participating students who received one or more accommodations*	595	22%	9 374	21%
Participating students who received one or more special provisions*	187	7%	1 144	3%
Students who did not complete any part of the assessment (no data)*	131	5%	2 866	6%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	1 263	45%	21 752	45%
Male	1 523	55%	26 730	55%
Gender not specified	0	0%	0	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
English language learners*	224	8%	2 532	5%
Students with special needs (excluding gifted)*	644	23%	14 483	30%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	1 321	47%	21 964	45%
Second-semester course	1 251	45%	21 765	45%
Full-year course	214	8%	4 753	10%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		43 413	
	2 535			
Speak only or mostly a language other than English at home	226	9%	2 757	6%
Speak another language as often as English at home	478	19%	4 980	11%
Attended three or more elementary schools from kindergarten to Grade 8	1 443	57%	17 179	40%

\* See the Explanation of Terms.

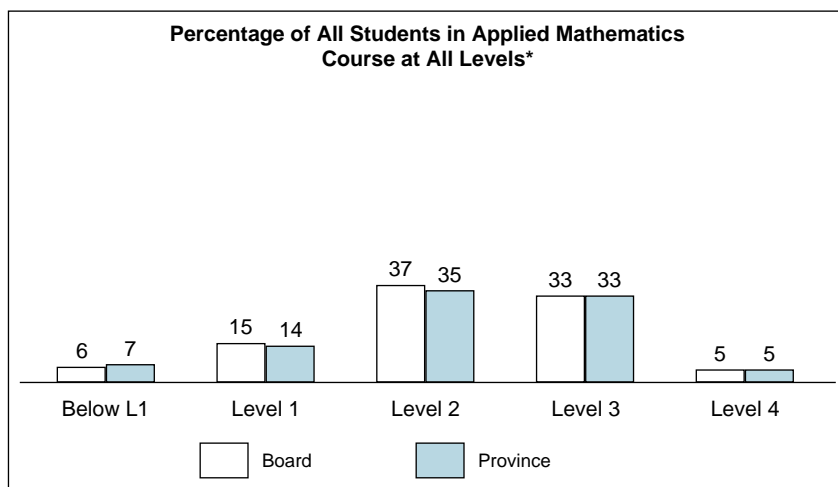
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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, 2008–2009, Applied Course

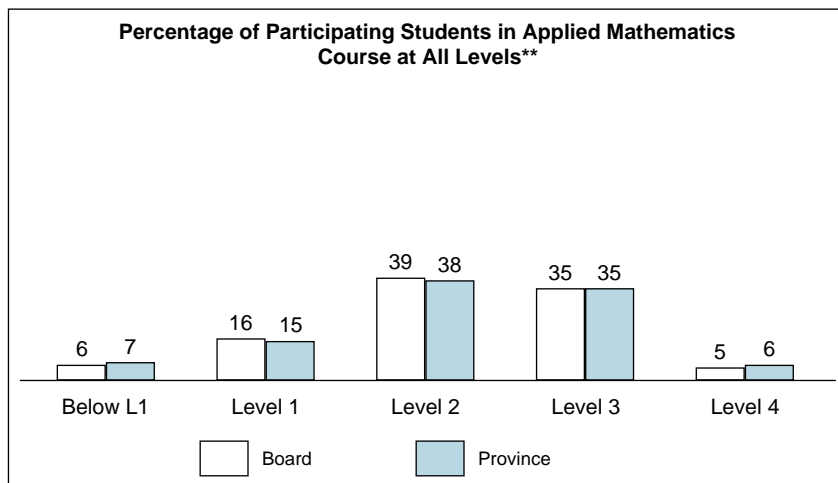
**Results for All Students**

All Students*			
Number of Students	Board 2 786		Province 48 482
	#	%	%
Level 4	126	5%	5%
Level 3	918	33%	33%
Level 2	1 027	37%	35%
Level 1	415	15%	14%
Below Level 1	169	6%	7%
Participating Students	2 655	95%	94%
No Data	131	5%	6%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>		<b>37%</b>	<b>38%</b>



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

Participating Students**			
Number of Students	Board 2 655		Province 45 616
	#	%	%
Level 4	126	5%	6%
Level 3	918	35%	35%
Level 2	1 027	39%	38%
Level 1	415	16%	15%
Below Level 1	169	6%	7%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>		<b>39%</b>	<b>40%</b>



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

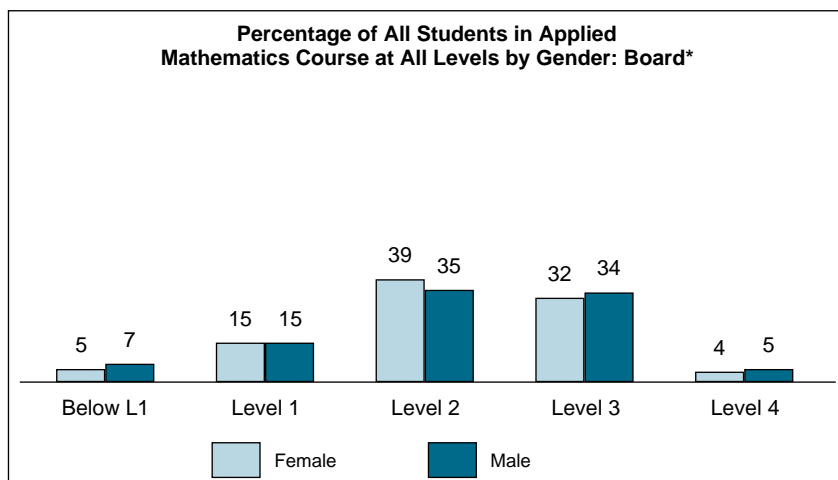
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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

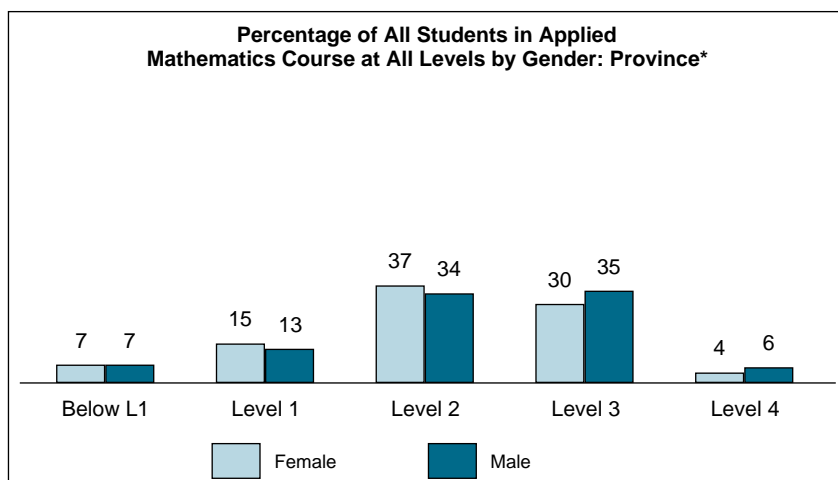
Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 1 263		Male 1 523	
	#	%	#	%
Level 4	50	4%	76	5%
Level 3	401	32%	517	34%
Level 2	497	39%	530	35%
Level 1	192	15%	223	15%
Below Level 1	67	5%	102	7%
Participating Students	1 207	96%	1 448	95%
No Data	56	4%	75	5%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>	<b>36%</b>		<b>39%</b>	



All Students: Province by Gender*				
Number of Students	Female 21 752		Male 26 730	
	#	%	#	%
Level 4	897	4%	1 618	6%
Level 3	6 581	30%	9 308	35%
Level 2	8 152	37%	8 965	34%
Level 1	3 337	15%	3 543	13%
Below Level 1	1 438	7%	1 777	7%
Participating Students	20 405	94%	25 211	94%
No Data	1 347	6%	1 519	6%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>	<b>34%</b>		<b>41%</b>	



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

## Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

**Contextual Information**

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

	Board		Province	
<b>Enrolment</b>				
Number of students in academic mathematics course	7 483		100 992	
Number of classes with students in academic mathematics course	293		4 156	
Number of schools with academic mathematics classes	30		684	
<b>Number Percent Number Percent</b>				
<b>Participation in the Assessment</b>				
Students who participated in the assessment	7 443	99%	100 060	99%
Participating students who received one or more accommodations*	217	3%	3 233	3%
Participating students who received one or more special provisions*	260	3%	1 709	2%
Students who did not complete any part of the assessment (no data)*	40	1%	932	1%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	3 683	49%	51 554	51%
Male	3 800	51%	49 438	49%
Gender not specified	0	0%	0	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
English language learners*	301	4%	3 942	4%
Students with special needs (excluding gifted)*	224	3%	4 639	5%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	3 563	48%	44 727	44%
Second-semester course	3 491	47%	43 199	43%
Full-year course	429	6%	13 066	13%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		7 226	96 485
Speak only or mostly a language other than English at home	935	13%	8 689	9%
Speak another language as often as English at home	1 953	27%	14 233	15%
Attended three or more elementary schools from kindergarten to Grade 8	3 990	55%	33 813	35%

\* See the Explanation of Terms.

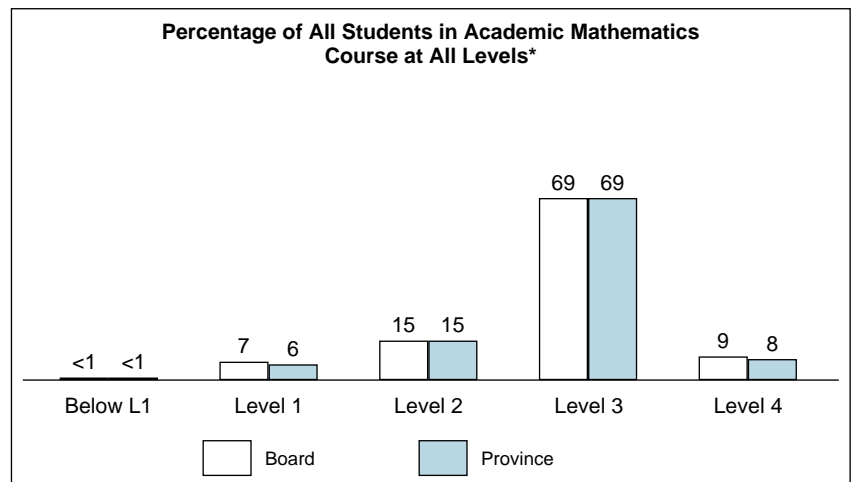
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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, 2008–2009, Academic Course

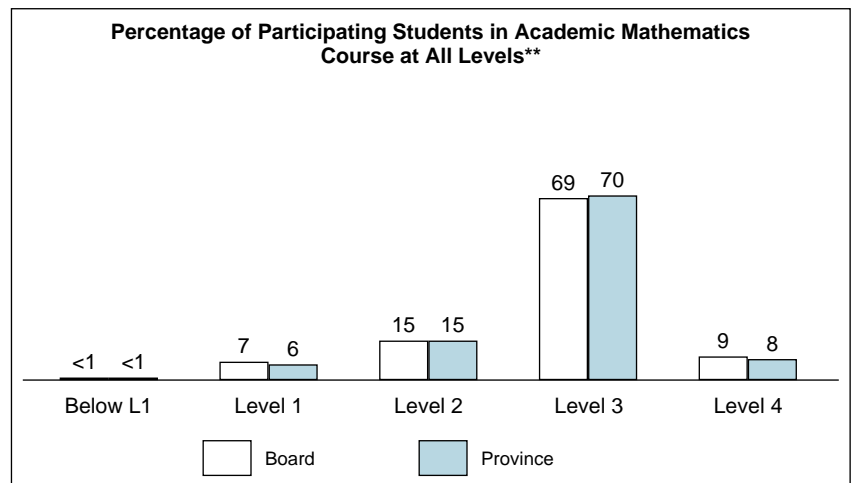
**Results for All Students**

All Students*			
Number of Students	Board 7 483		Province 100 992
	#	%	%
Level 4	653	9%	8%
Level 3	5 149	69%	69%
Level 2	1 118	15%	15%
Level 1	490	7%	6%
Below Level 1	33	<1%	<1%
Participating Students	7 443	99%	99%
No Data	40	1%	1%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>		<b>78%</b>	<b>77%</b>



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

Participating Students**			
Number of Students	Board 7 443		Province 100 060
	#	%	%
Level 4	653	9%	8%
Level 3	5 149	69%	70%
Level 2	1 118	15%	15%
Level 1	490	7%	6%
Below Level 1	33	<1%	<1%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>		<b>78%</b>	<b>78%</b>



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

\*\* Because percentages in tables and graphs are rounded, percentages may not add to 100.

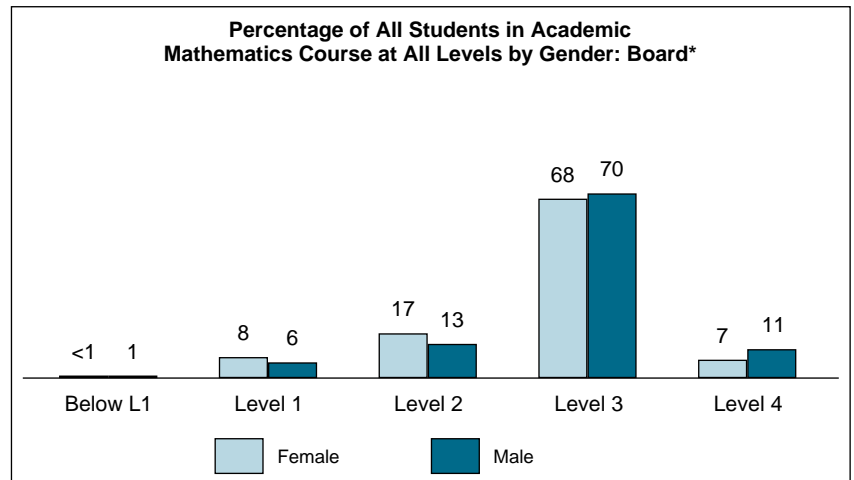
† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.



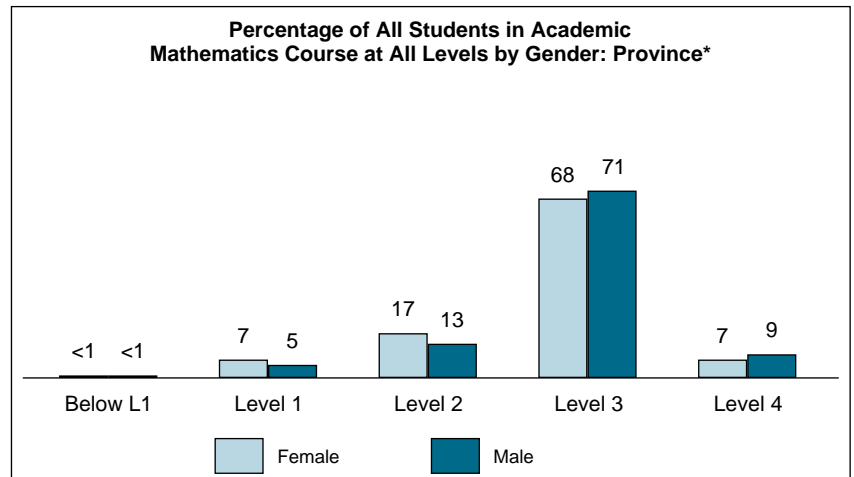
## Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

### Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 3 683		Male 3 800	
	#	%	#	%
Level 4	249	7%	404	11%
Level 3	2 505	68%	2 644	70%
Level 2	619	17%	499	13%
Level 1	280	8%	210	6%
Below Level 1	11	<1%	22	1%
Participating Students	3 664	99%	3 779	99%
No Data	19	1%	21	1%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>	<b>75%</b>		<b>80%</b>	



All Students: Province by Gender*				
Number of Students	Female 51 554		Male 49 438	
	#	%	#	%
Level 4	3 530	7%	4 629	9%
Level 3	35 048	68%	35 013	71%
Level 2	8 652	17%	6 476	13%
Level 1	3 715	7%	2 615	5%
Below Level 1	156	<1%	226	<1%
Participating Students	51 101	99%	48 959	99%
No Data	453	1%	479	1%
<b>At or Above Provincial Standard (Levels 3 and 4) †</b>	<b>75%</b>		<b>80%</b>	



\* 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.

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

## Grade 9 Assessment of Mathematics, 2008–2009

**Contextual Information over Time: Applied Mathematics Course**

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

	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009
<b>Enrolment</b>					
Number of students in applied mathematics course	2 883	2 878	2 529	2 840	2 786
Number of classes with students in applied mathematics course	152	197	161	174	168
Number of schools with applied mathematics classes	30	31	32	33	35
<b>Participation in the Assessment</b>					
Students who participated in the assessment	94%	92%	93%	93%	95%
Participating students who received one or more accommodations*	21%	17%	22%	20%	22%
Participating students who received one or more special provisions*	8%	8%	7%	6%	7%
Students who did not complete any part of the assessment (no data)*	5%	6%	7%	7%	5%
Students who were exempted*	1%	2%	--- <sup>++</sup>	---	---
<b>Gender<sup>†</sup> Based on number of students enrolled</b>					
Female	45%	45%	44%	44%	45%
Male	53%	55%	56%	56%	55%
Gender not specified	2%	0%	0%	0%	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>					
English language learners*	9%	12%	10%	8%	8%
Students with special needs (excluding gifted)*	22%	23%	24%	23%	23%
<b>Semester/Full Year Based on number of students enrolled</b>					
First-semester course	46%	47%	41%	47%	47%
Second-semester course	41%	42%	49%	46%	45%
Full-year course	13%	11%	10%	7%	8%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>					
	Number of Respondents:				
	n/a	n/a	2 241	2 538	2 535
Speak only or mostly a language other than English at home			11%	10%	9%
Speak another language as often as English at home	Information not available		17%	19%	19%
Attended three or more elementary schools from kindergarten to Grade 8			55%	57%	57%

\* 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.

<sup>++</sup> Beginning in 2006–2007, exemptions have not been permitted.

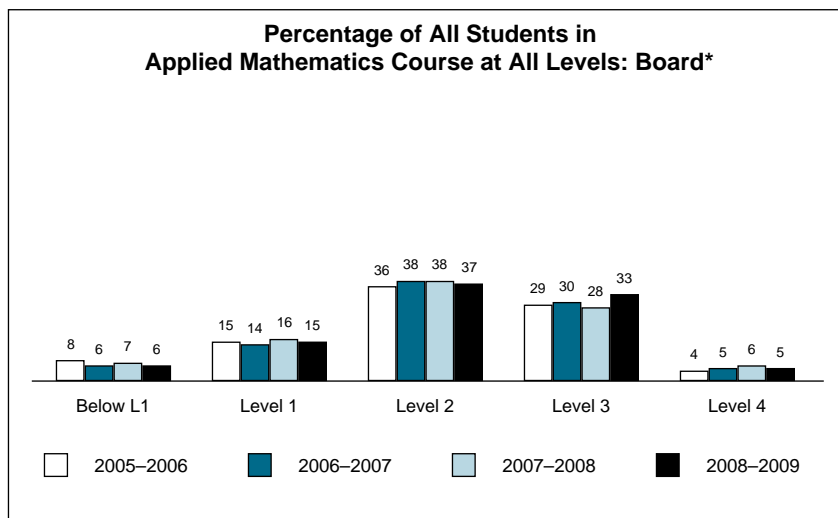
†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

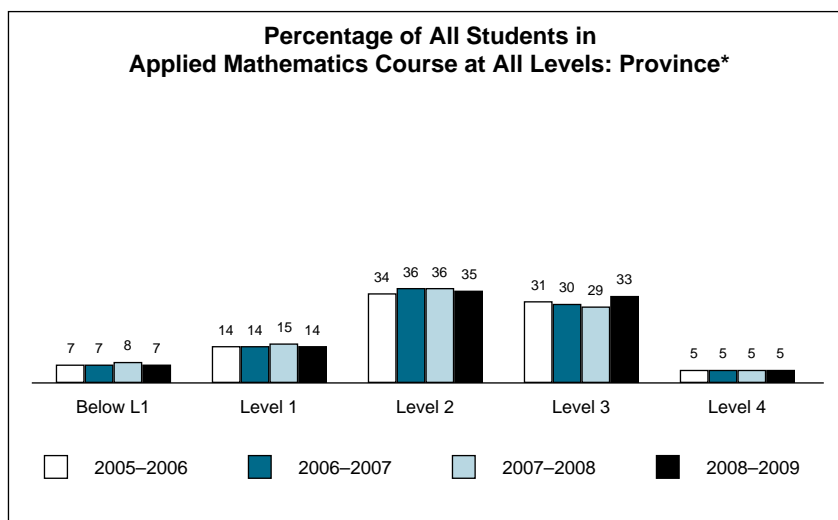
Results over Time, 2005–2006 to 2008–2009

**Applied Mathematics Course for All Students\*\***

Board*				
Year	'05-'06	'06-'07	'07-'08	'08-'09
<i>Number of Students</i>	2 878	2 529	2 840	2 786
<b>Level 4</b>	4%	5%	6%	5%
<b>Level 3</b>	29%	30%	28%	33%
<b>Level 2</b>	36%	38%	38%	37%
<b>Level 1</b>	15%	14%	16%	15%
<b>Below Level 1</b>	8%	6%	7%	6%
<i>Participating Students</i>	92%	93%	93%	95%
<b>No Data</b>	6%	7%	7%	5%
<b>Exempt†</b>	2%	---	---	---
<b>At or Above Provincial Standard (Levels 3 and 4)†</b>	33%	35%	33%	37%



Province*				
Year	'05-'06	'06-'07	'07-'08	'08-'09
<i>Number of Students</i>	50 687	49 056	47 817	48 482
<b>Level 4</b>	5%	5%	5%	5%
<b>Level 3</b>	31%	30%	29%	33%
<b>Level 2</b>	34%	36%	36%	35%
<b>Level 1</b>	14%	14%	15%	14%
<b>Below Level 1</b>	7%	7%	8%	7%
<i>Participating Students</i>	90%	91%	93%	94%
<b>No Data</b>	8%	9%	7%	6%
<b>Exempt†</b>	2%	---	---	---
<b>At or Above Provincial Standard (Levels 3 and 4)†</b>	35%	35%	34%	38%



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

\*\* Note that significant revisions were made to applied courses in 2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

† 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.

‡ In 2006–2007, students who were coded “exempt” were placed in the “no data” category. Since this may affect the percentage of students for whom no data are available, the results may not be comparable with those of previous years.

## Grade 9 Assessment of Mathematics, 2008–2009

**Contextual Information over Time: Academic Mathematics Course**

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

	2004–2005	2005–2006	2006–2007	2007–2008	2008–2009
<b>Enrolment</b>					
Number of students in academic mathematics course	6 995	7 066	7 452	7 301	7 483
Number of classes with students in academic mathematics course	269	290	297	291	293
Number of schools with academic mathematics classes	27	27	29	30	30
<b>Participation in the Assessment</b>					
Students who participated in the assessment	99%	99%	99%	100%	99%
Participating students who received one or more accommodations*	3%	2%	2%	2%	3%
Participating students who received one or more special provisions*	3%	3%	4%	3%	3%
Students who did not complete any part of the assessment (no data)*	1%	1%	1%	<1%	1%
Students who were exempted*	<1%	<1%	---**	---	---
<b>Gender† Based on number of students enrolled</b>					
Female	48%	50%	50%	49%	49%
Male	50%	50%	50%	51%	51%
Gender not specified	2%	0%	0%	0%	0%
<b>Student Status† Based on number of students enrolled</b>					
English language learners*	3%	5%	5%	4%	4%
Students with special needs (excluding gifted)*	3%	3%	3%	3%	3%
<b>Semester/Full Year Based on number of students enrolled</b>					
First-semester course	50%	46%	45%	46%	48%
Second-semester course	40%	45%	45%	47%	47%
Full-year course	11%	10%	10%	7%	6%
<b>Language and School Background†† Based on Student Questionnaire data</b>					
	Number of Respondents:				
	n/a	n/a	7 172	7 073	7 226
Speak only or mostly a language other than English at home	Information not available		13%	13%	13%
Speak another language as often as English at home	Information not available		24%	26%	27%
Attended three or more elementary schools from kindergarten to Grade 8	Information not available		55%	58%	55%

\* 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.

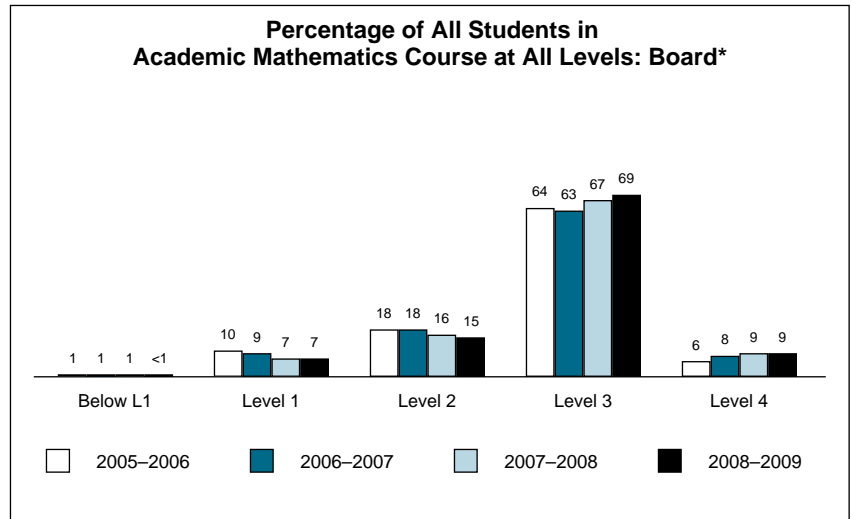
†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

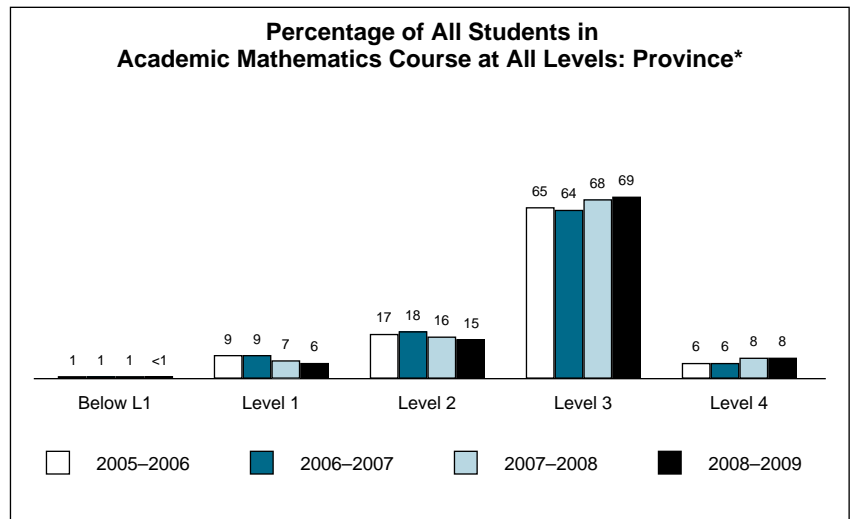
Results over Time, 2005–2006 to 2008–2009

Academic Mathematics Course for All Students

Board*				
Year	'05-'06	'06-'07	'07-'08	'08-'09
<i>Number of Students</i>	7 066	7 452	7 301	7 483
Level 4	6%	8%	9%	9%
Level 3	64%	63%	67%	69%
Level 2	18%	18%	16%	15%
Level 1	10%	9%	7%	7%
Below Level 1	1%	1%	1%	<1%
<i>Participating Students</i>	99%	99%	100%	99%
No Data	1%	1%	<1%	1%
Exempt†	<1%	---	---	---
<b>At or Above Provincial Standard (Levels 3 and 4)†</b>	70%	71%	76%	78%



Province*				
Year	'05-'06	'06-'07	'07-'08	'08-'09
<i>Number of Students</i>	103 412	103 011	100 823	100 992
Level 4	6%	6%	8%	8%
Level 3	65%	64%	68%	69%
Level 2	17%	18%	16%	15%
Level 1	9%	9%	7%	6%
Below Level 1	1%	1%	1%	<1%
<i>Participating Students</i>	98%	98%	99%	99%
No Data	1%	2%	1%	1%
Exempt†	<1%	---	---	---
<b>At or Above Provincial Standard (Levels 3 and 4)†</b>	71%	71%	75%	77%



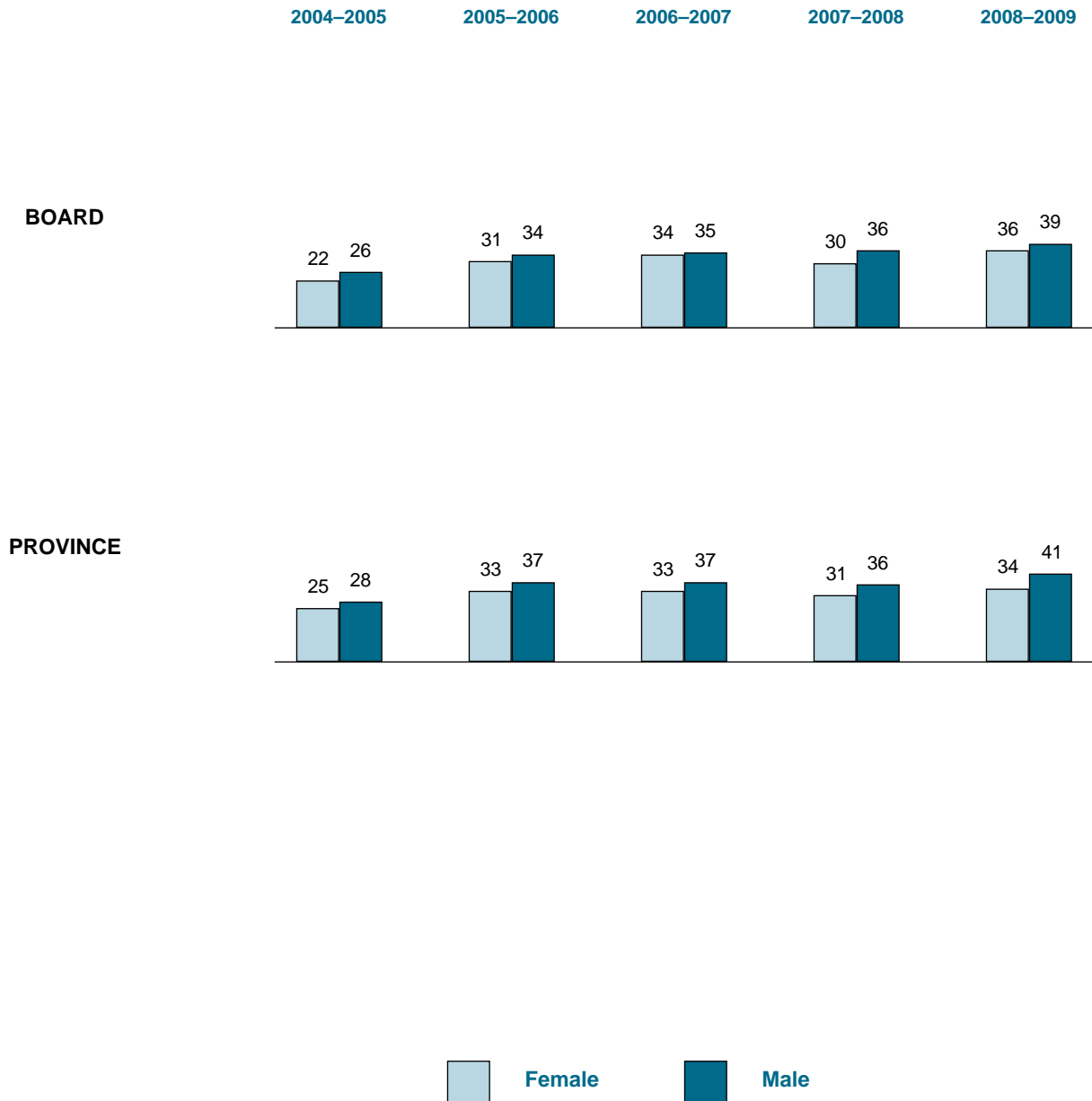
\* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

† 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.

‡ In 2006–2007, students who were coded “exempt” were placed in the “no data” category. Since this may affect the percentage of students for whom no data are available, the results may not be comparable with those of previous years.

**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†**

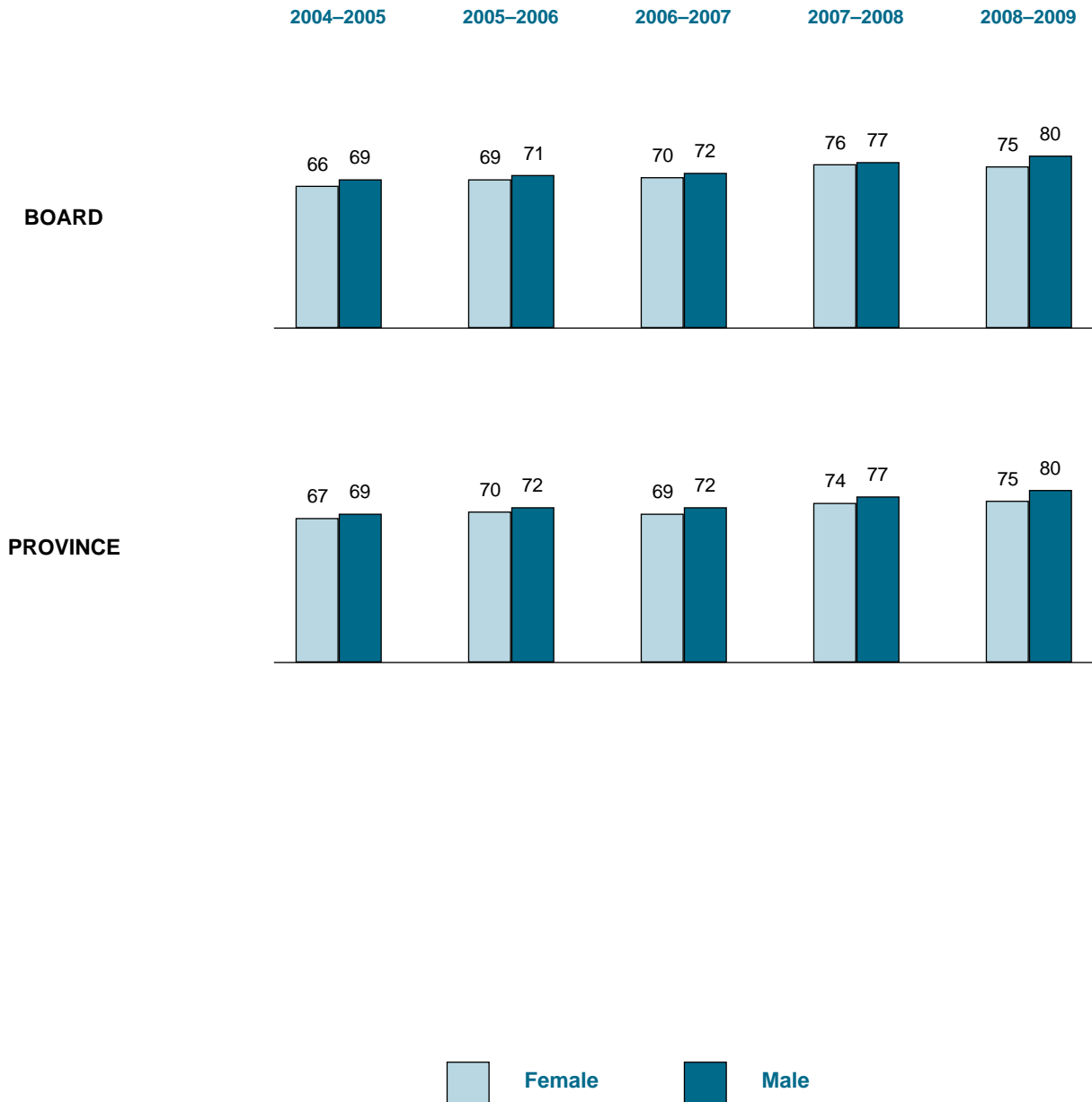
	2004-2005		2005-2006		2006-2007		2007-2008		2008-2009	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	1 288	1 523	1 287	1 591	1 106	1 423	1 249	1 591	1 263	1 523
Province	22 371	27 413	22 884	27 802	22 126	26 926	21 626	26 182	21 752	26 730

† Includes only students for whom gender data were available.

\* Note that significant revisions were made to applied courses in 2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

**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**

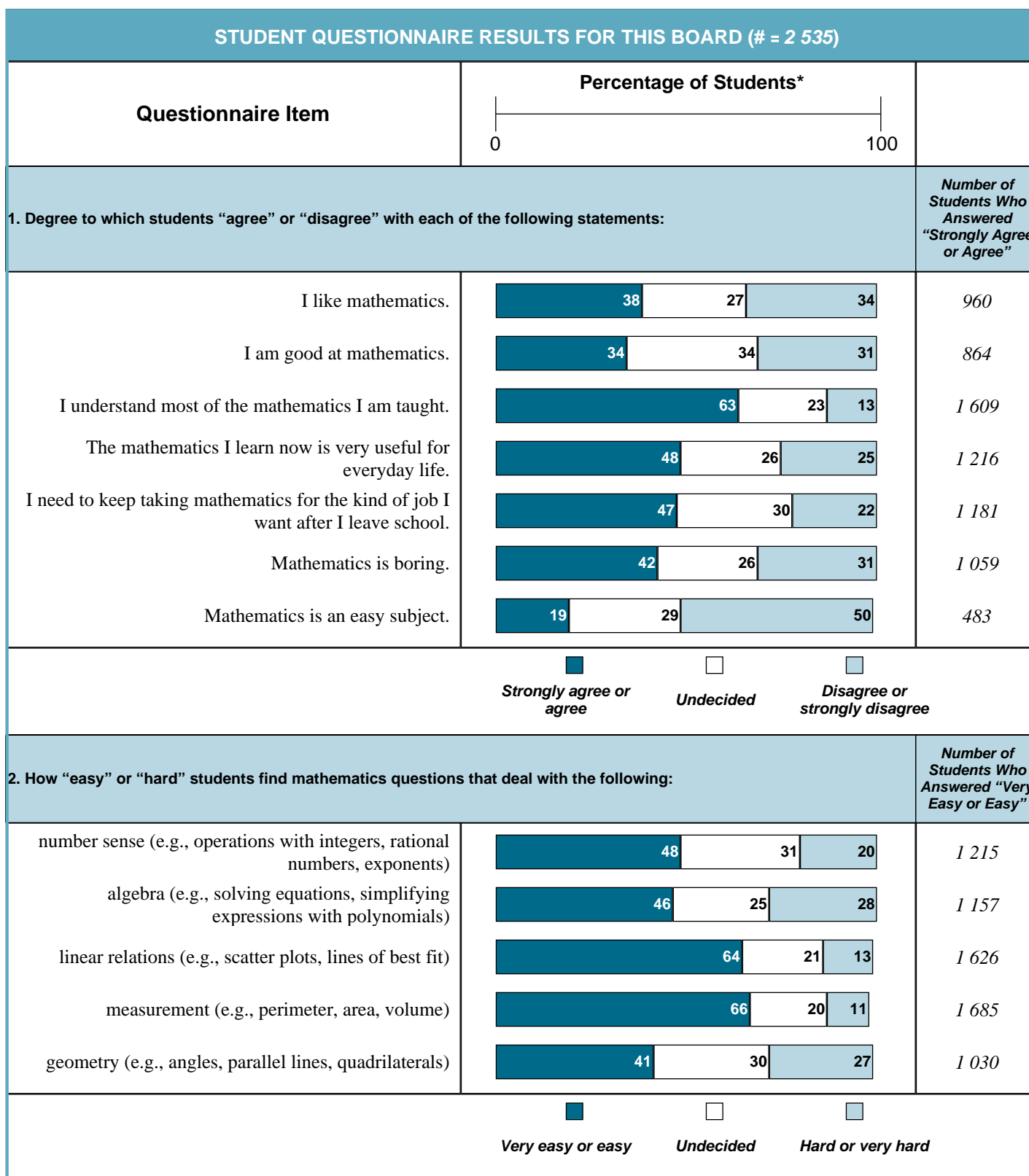


**Total Number of Students in Academic Mathematics Course†**

	2004-2005		2005-2006		2006-2007		2007-2008		2008-2009	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	3 372	3 517	3 553	3 513	3 744	3 708	3 584	3 717	3 683	3 800
Province	52 030	50 129	53 183	50 228	52 887	50 122	51 367	49 452	51 554	49 438

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2008–2009, Applied Course



\* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a box, the percentage of responses is smaller than 4.



Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 535)		
Questionnaire Item	Percentage of Students*	
<b>3. Students have the following <i>at home</i> to use for mathematics school work:</b>		<b>Number of Students Who Answered "Yes"</b>
a computer		1 410
a scientific calculator		1 954
a graphing calculator		232
<b>4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day:</b>		<b>Number of Students</b>
more than 45 minutes		377
between 31 and 45 minutes		636
30 minutes or less		1 160
mathematics homework not usually assigned		326
<b>5. How often students complete all of their mathematics homework:</b>		<b>Number of Students</b>
never or seldom		386
sometimes		813
often or always		1 295
<b>6. How often students have been absent from their Grade 9 mathematics class this year:</b>		<b>Number of Students</b>
never		326
one to four times		1 193
five to nine times		544
10 or more times		430

\* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a box, the percentage of responses is smaller than 4.

Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 535)		
Questionnaire Item	Percentage of Students*	
<b>7. How often students have been late for their Grade 9 mathematics class this year:</b>		<b>Number of Students</b>
never	23	591
one to four times	38	969
five to nine times	18	446
10 or more times	19	482
<b>8. Language(s) students speak at home:</b>		<b>Number of Students</b>
only or mostly English	70	1 787
another language (or other languages) as often as English	19	478
only or mostly another language (or other languages)	9	226
<b>9. Number of elementary schools (kindergarten to Grade 8) attended:</b>		<b>Number of Students</b>
one or two schools	41	1 040
three schools	26	667
four schools	15	373
five schools or more	16	403

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

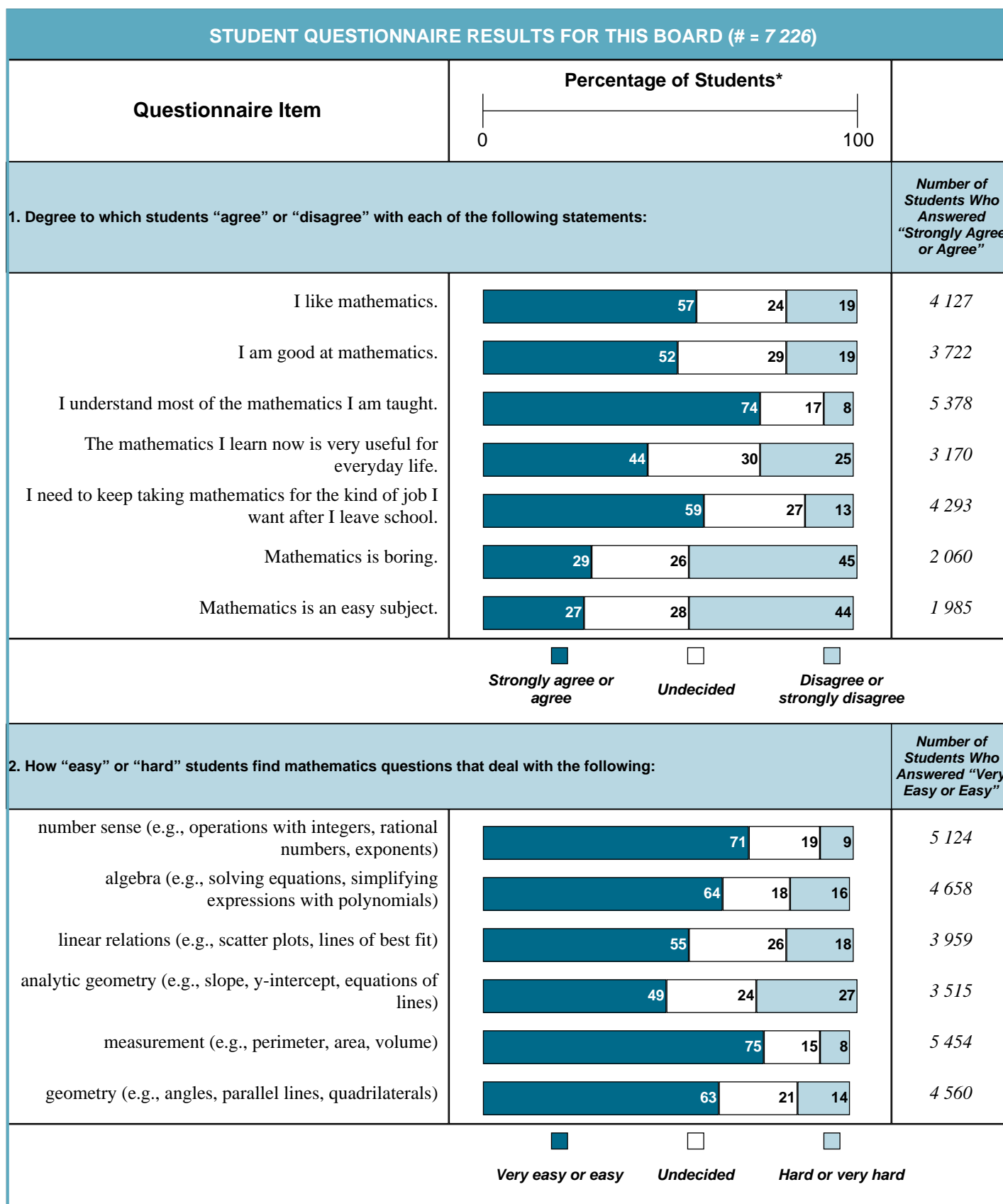
Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 555)	Female* (# = 1 153)	Male* (# = 1 382)	All Students (# = 43 413)	Female* (# = 19 517)	Male* (# = 23 896)
<b>Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:</b>						
I like mathematics.	38%	29%	45%	36%	30%	42%
I am good at mathematics.	34%	26%	41%	36%	28%	43%
I understand most of the mathematics I am taught.	63%	60%	66%	63%	59%	66%
The mathematics I learn now is very useful for everyday life.	48%	45%	51%	42%	39%	44%
I need to keep taking mathematics for the kind of job I want after I leave school.	47%	43%	50%	43%	39%	46%
Mathematics is boring.	42%	43%	40%	42%	44%	41%
Mathematics is an easy subject.	19%	14%	23%	22%	17%	27%
<b>Percentage of students indicating that the following are “very easy” or “easy”:</b>						
number sense	48%	44%	51%	47%	43%	50%
algebra	46%	45%	46%	43%	44%	43%
linear relations	64%	63%	65%	64%	63%	64%
measurement	66%	67%	66%	66%	65%	67%
geometry	41%	36%	45%	41%	36%	45%
<b>Percentage of students indicating they have the following at home to use for mathematics school work:</b>						
a computer	56%	56%	55%	45%	46%	44%
a scientific calculator	77%	80%	75%	75%	79%	73%
a graphing calculator	9%	8%	10%	10%	8%	11%
<b>Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:**</b>						
30 minutes or less	46%	44%	47%	46%	44%	47%
more than 30 minutes	40%	44%	37%	34%	38%	31%
mathematics homework not usually assigned	13%	11%	14%	19%	17%	21%
<b>Percentage of students indicating they complete all of their mathematics homework**</b>						
never or seldom.	15%	12%	18%	16%	13%	19%
sometimes.	32%	31%	33%	31%	31%	31%
often or always.	51%	55%	48%	51%	55%	48%
<b>Percentage of students indicating they have been absent from their mathematics class this year**</b>						
four times or less.	60%	59%	60%	60%	58%	61%
five times or more.	38%	39%	38%	39%	41%	38%
<b>Percentage of students indicating how often they have been late for their mathematics class this year**</b>						
four times or less.	62%	62%	61%	69%	69%	68%
five times or more.	37%	36%	37%	30%	29%	30%
<b>Percentage of students indicating that they speak the following language(s) at home:**</b>						
only or mostly English	70%	71%	70%	81%	81%	81%
another language (or other languages) as often as English	19%	19%	18%	11%	12%	11%
only or mostly another language (or other languages)	9%	8%	10%	6%	6%	7%
<b>Percentage of students indicating that from kindergarten to Grade 8 they attended</b>						
three or more elementary schools.	57%	56%	58%	40%	40%	39%

\* 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, 2008–2009, Academic Course



\* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a box, the percentage of responses is smaller than 4.

Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 226)		
Questionnaire Item	Percentage of Students*	
<b>3. Students have the following <i>at home</i> to use for mathematics school work:</b>		<b>Number of Students Who Answered "Yes"</b>
a computer		4 868
a scientific calculator		6 544
a graphing calculator		836
<p style="text-align: center;"> <input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No                 </p>		
<b>4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day:</b>		<b>Number of Students</b>
more than 45 minutes		2 108
between 31 and 45 minutes		2 669
30 minutes or less		2 244
mathematics homework not usually assigned		113
<b>5. How often students complete all of their mathematics homework:</b>		<b>Number of Students</b>
never or seldom		758
sometimes		1 610
often or always		4 749
<b>6. How often students have been absent from their Grade 9 mathematics class this year:</b>		<b>Number of Students</b>
never		1 362
one to four times		4 301
five to nine times		1 020
10 or more times		432

\* Percentages may not add to 100, due to a lack of or ambiguous responses. Where there is no number in a box, the percentage of responses is smaller than 4.

Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 226)		
Questionnaire Item	Percentage of Students*	
<b>7. How often students have been late for their Grade 9 mathematics class this year:</b>		<b>Number of Students</b>
never		2 927
one to four times		2 899
five to nine times		802
10 or more times		470
<b>8. Language(s) students speak at home:</b>		<b>Number of Students</b>
only or mostly English		4 214
another language (or other languages) as often as English		1 953
only or mostly another language (or other languages)		935
<b>9. Number of elementary schools (kindergarten to Grade 8) attended:</b>		<b>Number of Students</b>
one or two schools		3 097
three schools		1 967
four schools		1 125
five schools or more		898

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

Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 7 226)	Female* (# = 3 562)	Male* (# = 3 664)	All Students (# = 96 485)	Female* (# = 49 343)	Male* (# = 47 142)
<b>Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:</b>						
I like mathematics.	57%	50%	64%	55%	49%	61%
I am good at mathematics.	52%	43%	60%	53%	45%	61%
I understand most of the mathematics I am taught.	74%	71%	78%	73%	69%	77%
The mathematics I learn now is very useful for everyday life.	44%	40%	47%	38%	34%	42%
I need to keep taking mathematics for the kind of job I want after I leave school.	59%	56%	62%	56%	54%	59%
Mathematics is boring.	29%	29%	28%	30%	30%	30%
Mathematics is an easy subject.	27%	21%	33%	28%	23%	34%
<b>Percentage of students indicating that the following are “very easy” or “easy”:</b>						
number sense	71%	67%	74%	68%	65%	72%
algebra	64%	65%	64%	63%	63%	63%
linear relations	55%	52%	58%	52%	49%	56%
analytic geometry	49%	48%	50%	48%	46%	50%
measurement	75%	73%	77%	76%	74%	78%
geometry	63%	60%	66%	61%	57%	65%
<b>Percentage of students indicating they have the following at home to use for mathematics school work:</b>						
a computer	67%	69%	66%	56%	57%	54%
a scientific calculator	91%	92%	89%	87%	89%	86%
a graphing calculator	12%	11%	12%	9%	8%	10%
<b>Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:**</b>						
30 minutes or less	31%	25%	36%	37%	32%	43%
more than 30 minutes	66%	72%	60%	59%	65%	52%
mathematics homework not usually assigned	2%	1%	2%	3%	2%	3%
<b>Percentage of students indicating they complete all of their mathematics homework**</b>						
never or seldom.	10%	7%	13%	12%	9%	15%
sometimes.	22%	20%	25%	24%	22%	26%
often or always.	66%	71%	60%	63%	68%	57%
<b>Percentage of students indicating they have been absent from their mathematics class this year**</b>						
four times or less.	78%	78%	79%	73%	72%	74%
five times or more.	20%	21%	20%	25%	26%	24%
<b>Percentage of students indicating how often they have been late for their mathematics class this year**</b>						
four times or less.	81%	83%	79%	84%	85%	82%
five times or more.	18%	16%	19%	15%	13%	16%
<b>Percentage of students indicating that they speak the following language(s) at home:**</b>						
only or mostly English	58%	60%	57%	75%	76%	74%
another language (or other languages) as often as English	27%	27%	27%	15%	15%	15%
only or mostly another language (or other languages)	13%	11%	15%	9%	8%	10%
<b>Percentage of students indicating that from kindergarten to Grade 8 they attended</b>						
three or more elementary schools.	55%	55%	56%	35%	35%	35%

\* 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, 2008–2009

## EXPLANATION OF TERMS

<b>All Students</b>	Results are reported for all students in the course.
<b>Participating Students</b>	Results are reported only for those students who took part in the assessment (excludes the "no data" category).
<b>Provincial Standard</b>	The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard.
<b>Level 4 (80–100%)</b>	The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard.
<b>Level 3 (70–79%)</b>	The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard.
<b>Level 2 (60–69%)</b>	The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching</i> , the provincial standard.
<b>Level 1 (50–59%)</b>	The student has demonstrated a passable level of achievement. Achievement is <i>below</i> the provincial standard.
<b>Below Level 1/ Below L1</b>	The student has not demonstrated sufficient achievement of curriculum expectations (below 50%).
<b>No Data</b>	Students who did not complete any part of the assessment due to absence or for medical or other reasons.
<b>Exempt</b>	Beginning in 2006–2007, exemptions have not been permitted.
<b>English Language Learners</b>	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.
<b>Students Receiving One or More Special Provisions</b>	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> .
<b>Students with Special Needs (excluding gifted)</b>	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.
<b>Students Receiving One or More Accommodations</b>	Students identified by the school as receiving accommodations. Students identified as gifted are not included. Detailed information about accommodations is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> .
<b>N/R</b>	"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.
<b>N/D</b>	"No data available" is used to indicate that there were no students in the course for the years specified.
<b>W</b>	Results for some or all students are being withheld by EQAO. For further information, please contact personnel at the board.