



# School Board Report



## Grade 9 Assessment of Mathematics, 2010–2011

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

On behalf of EQAO, I am pleased to provide you with this report on the results of the 2010–2011 Grade 9 Assessment of Mathematics. Enclosed you will find student results for both the 2010–2011 school year and previous years, so that you can gauge progress over time. You will also find demographic and attitudinal information about the student population assessed, which will support deeper analysis and provide an important context for these results.

Since the creation of this agency, EQAO data have been a catalyst for improving student learning and achievement at all levels of the education system. From Ontario’s classrooms and staff rooms to its school boards and Ministry, educators and education professionals from across the province have become increasingly sophisticated at using EQAO data as an integral part of their continuous improvement efforts.

Within schools, EQAO data are used regularly to guide school improvement initiatives by helping to identify areas of strength and areas needing improvement and by helping to support changes in instructional practices that may be required. The provincial test results can also help schools engage in meaningful discussions about student achievement with their parent community. We all know that parents can and do exert a powerful influence on their children’s work habits, behaviour, attitudes toward school and, ultimately, learning and achievement. EQAO is pleased to help strengthen the partnership between home and school by offering a series of resources for parents and educators, available on the agency’s Web site, to help school communities engage in the kind of meaningful, data-based dialogue that supports student success.

Of course, EQAO data are only one of the sources of information that should be used to assess student achievement. Provincial testing results should always be considered alongside other school and school board-based information.

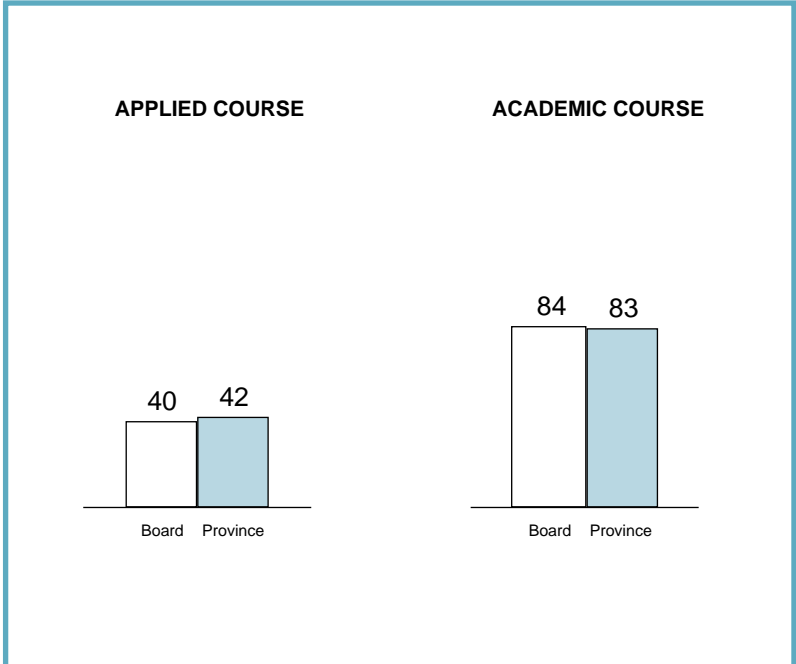
At EQAO, we are proud to deliver powerful information that supports Ontario’s parents, educators and administrators in their efforts to improve student achievement. I trust that this report will provide you with a valuable set of tools to further support the drive toward excellence in your school community. I am confident that the information in the report will contribute to our shared commitment and purposeful actions toward helping each student reach his or her highest 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), 2010–2011



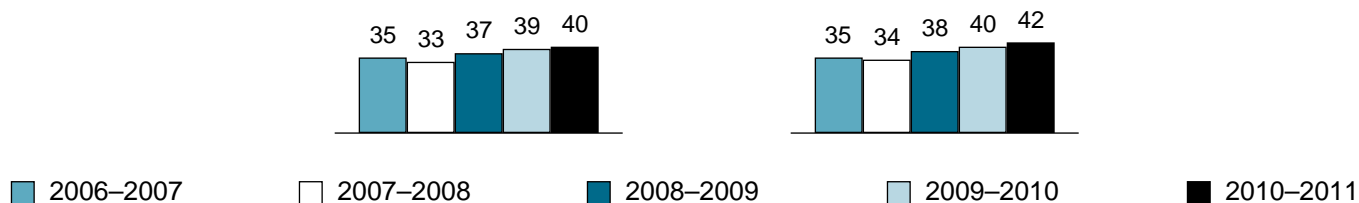
Grade 9 Assessment of Mathematics, 2010–2011

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

APPLIED MATHEMATICS

Board

Province



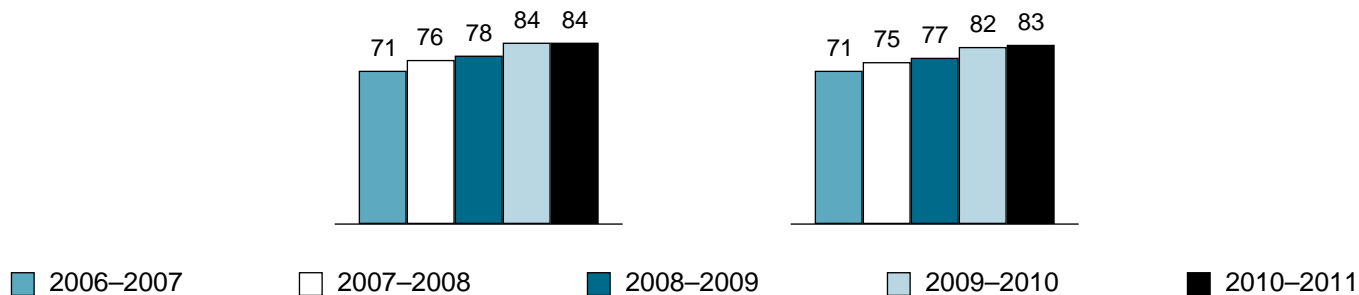
Total Number of Students

	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>	<u>2009–2010</u>	<u>2010–2011</u>
Board	2 529	2 840	2 786	2 851	2 684
Province	49 056	47 817	48 482	47 566	44 095

ACADEMIC MATHEMATICS

Board

Province



Total Number of Students

	<u>2006–2007</u>	<u>2007–2008</u>	<u>2008–2009</u>	<u>2009–2010</u>	<u>2010–2011</u>
Board	7 452	7 301	7 483	7 336	7 446
Province	103 011	100 823	100 992	101 268	99 278

## 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 of the current and previous administrations 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](http://www.eqao.com).

## Grade 9 Assessment of Mathematics, 2010–2011, 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	2 684		44 095	
Number of classes with students in applied mathematics course	163		2 751	
Number of schools with applied mathematics classes	33		704	
	Number	Percent	Number	Percent
<b>Participation in the Assessment</b>				
Students who participated in the assessment	2 607	97%	41 993	95%
Participating students who received one or more accommodations*	619	24%	10 464	25%
Participating students who received one or more special provisions*	262	10%	1 616	4%
Students who did not complete any part of the assessment (no data)*	77	3%	2 102	5%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	1 209	45%	19 721	45%
Male	1 475	55%	24 374	55%
Gender not specified	0	0%	0	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
English language learners*	310	12%	2 894	7%
Students with special education needs (excluding gifted)*	652	24%	14 436	33%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	1 133	42%	19 794	45%
Second-semester course	1 327	49%	20 155	46%
Full-year course	224	8%	4 146	9%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		38 230	
Speak only or mostly a language other than English at home	257	11%	2 970	8%
Speak another language as often as English at home	482	21%	5 050	13%
Attended three or more elementary schools from kindergarten to Grade 8	1 320	56%	15 653	41%

\* See the Explanation of Terms.

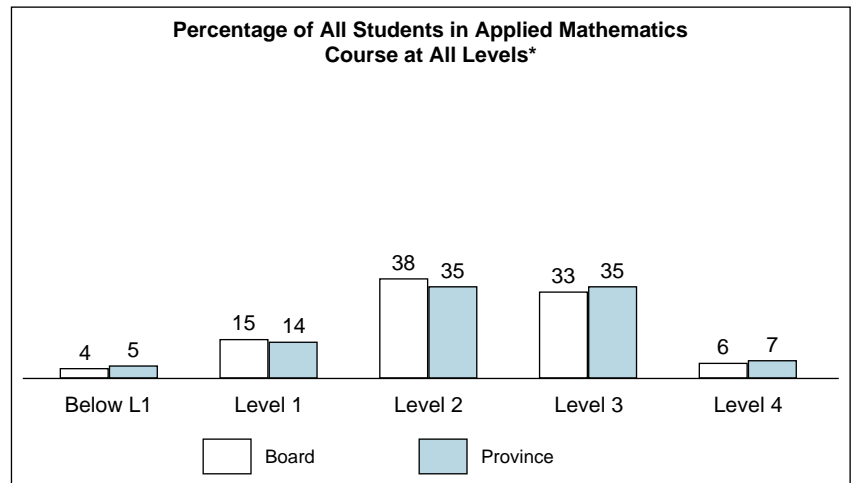
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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, 2010–2011, Applied Course

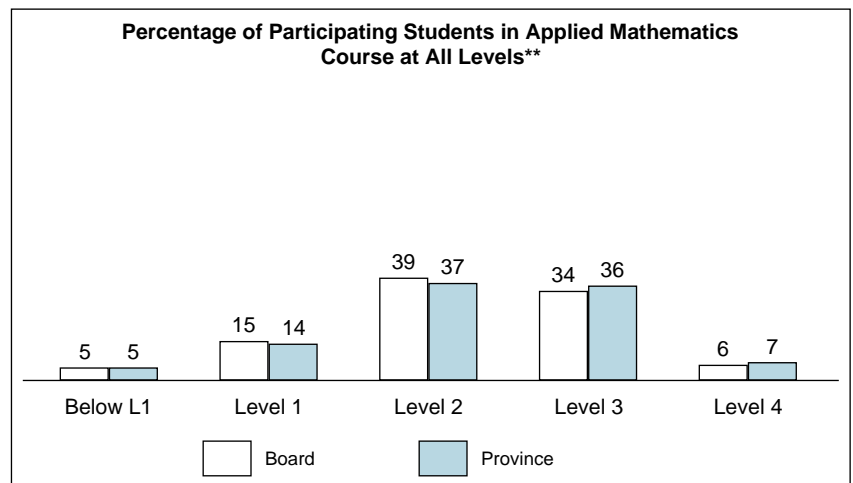
### Results for All Students

All Students*			
Number of Students	Board 2 684		Province 44 095
	#	%	%
Level 4	169	6%	7%
Level 3	898	33%	35%
Level 2	1 022	38%	35%
Level 1	399	15%	14%
Below Level 1	119	4%	5%
Participating Students	2 607	97%	95%
No Data	77	3%	5%
At or Above Provincial Standard (Levels 3 and 4) †		40%	42%



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

Participating Students**			
Number of Students	Board 2 607		Province 41 993
	#	%	%
Level 4	169	6%	7%
Level 3	898	34%	36%
Level 2	1 022	39%	37%
Level 1	399	15%	14%
Below Level 1	119	5%	5%
At or Above Provincial Standard (Levels 3 and 4) †		41%	44%



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

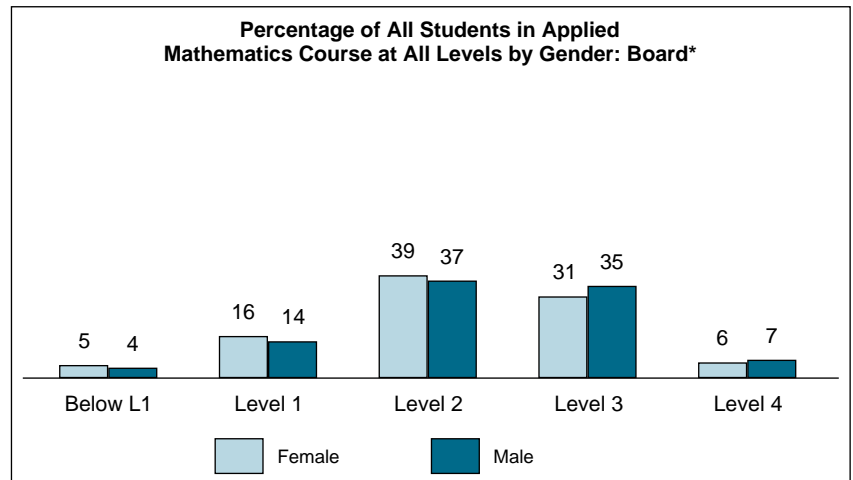
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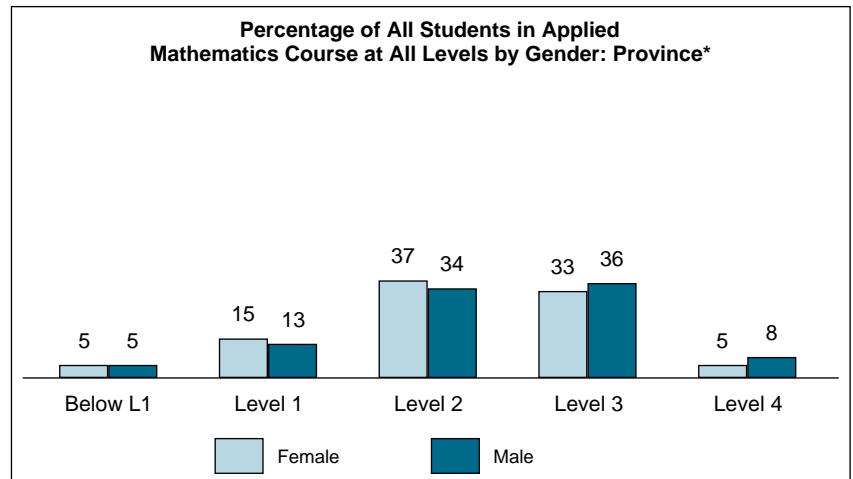
Grade 9 Assessment of Mathematics, 2010–2011, Applied Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 1 209		Male 1 475	
	#	%	#	%
Level 4	69	6%	100	7%
Level 3	380	31%	518	35%
Level 2	470	39%	552	37%
Level 1	194	16%	205	14%
Below Level 1	59	5%	60	4%
Participating Students	1 172	97%	1 435	97%
No Data	37	3%	40	3%
At or Above Provincial Standard (Levels 3 and 4) †	37%		42%	



All Students: Province by Gender*				
Number of Students	Female 19 721		Male 24 374	
	#	%	#	%
Level 4	1 082	5%	1 997	8%
Level 3	6 603	33%	8 658	36%
Level 2	7 243	37%	8 191	34%
Level 1	2 893	15%	3 082	13%
Below Level 1	977	5%	1 267	5%
Participating Students	18 798	95%	23 195	95%
No Data	923	5%	1 179	5%
At or Above Provincial Standard (Levels 3 and 4) †	39%		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, 2010–2011, 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	7 446		99 278	
Number of classes with students in academic mathematics course	309		4 139	
Number of schools with academic mathematics classes	30		684	
	Number	Percent	Number	Percent
<b>Participation in the Assessment</b>				
Students who participated in the assessment	7 409	100%	98 481	99%
Participating students who received one or more accommodations*	216	3%	4 012	4%
Participating students who received one or more special provisions*	245	3%	1 951	2%
Students who did not complete any part of the assessment (no data)*	37	<1%	797	1%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	3 660	49%	50 814	51%
Male	3 786	51%	48 464	49%
Gender not specified	0	0%	0	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
English language learners*	310	4%	4 069	4%
Students with special education needs (excluding gifted)*	209	3%	5 354	5%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	3 419	46%	43 509	44%
Second-semester course	3 436	46%	43 054	43%
Full-year course	591	8%	12 715	13%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		7 112	93 257
Speak only or mostly a language other than English at home	908	13%	8 372	9%
Speak another language as often as English at home	1 798	25%	13 688	15%
Attended three or more elementary schools from kindergarten to Grade 8	3 873	54%	32 489	35%

\* See the Explanation of Terms.

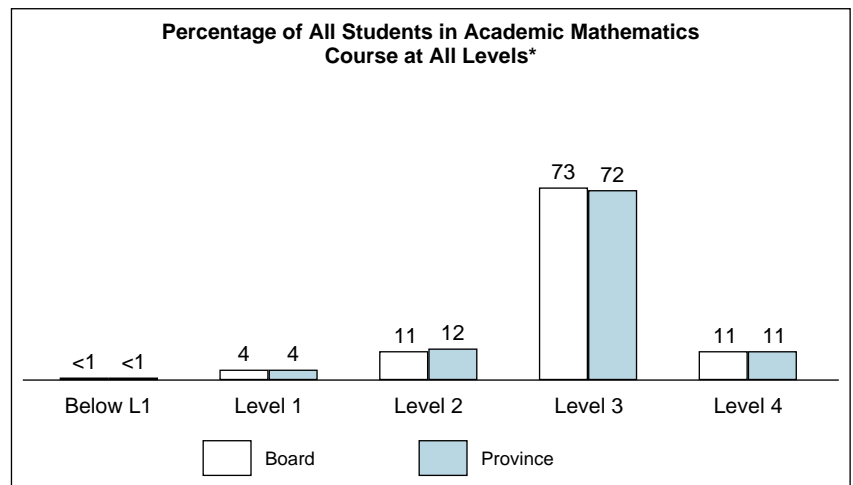
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Grade 9 Assessment of Mathematics, 2010–2011, Academic Course

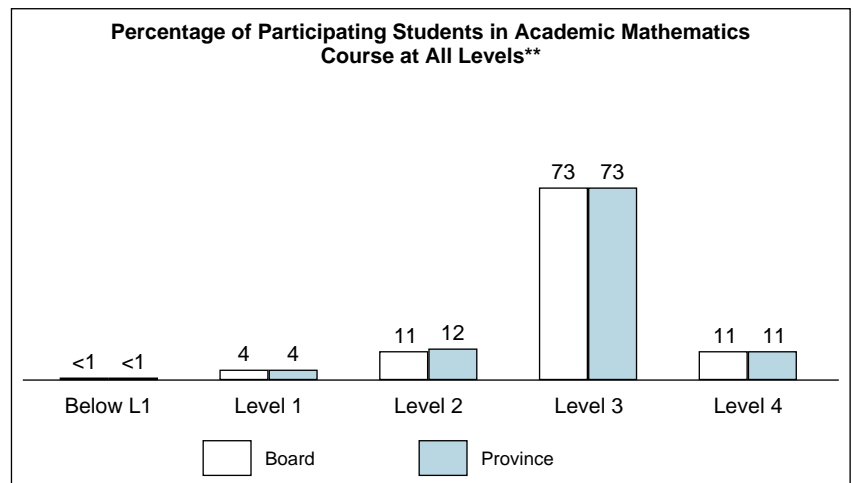
Results for All Students

All Students*			
Number of Students	Board 7 446		Province 99 278
	#	%	%
Level 4	850	11%	11%
Level 3	5 423	73%	72%
Level 2	826	11%	12%
Level 1	299	4%	4%
Below Level 1	11	<1%	<1%
Participating Students	7 409	100%	99%
No Data	37	<1%	1%
At or Above Provincial Standard (Levels 3 and 4) †		84%	83%



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

Participating Students**			
Number of Students	Board 7 409		Province 98 481
	#	%	%
Level 4	850	11%	11%
Level 3	5 423	73%	73%
Level 2	826	11%	12%
Level 1	299	4%	4%
Below Level 1	11	<1%	<1%
At or Above Provincial Standard (Levels 3 and 4) †		85%	84%



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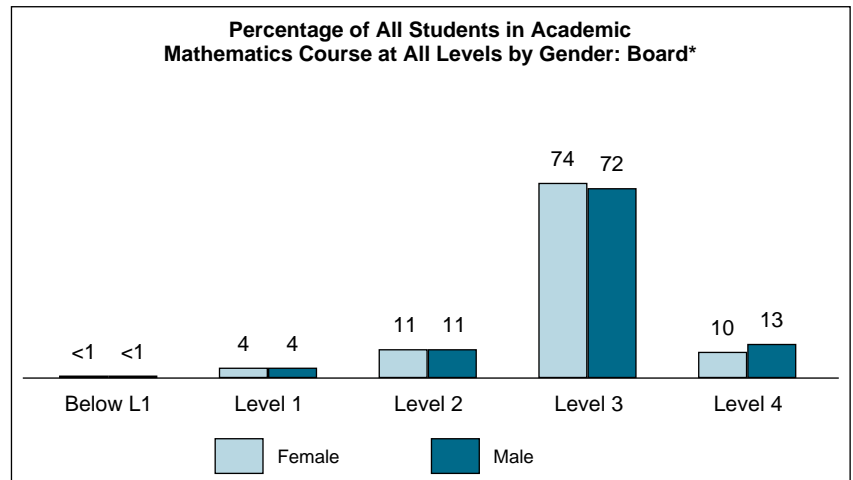
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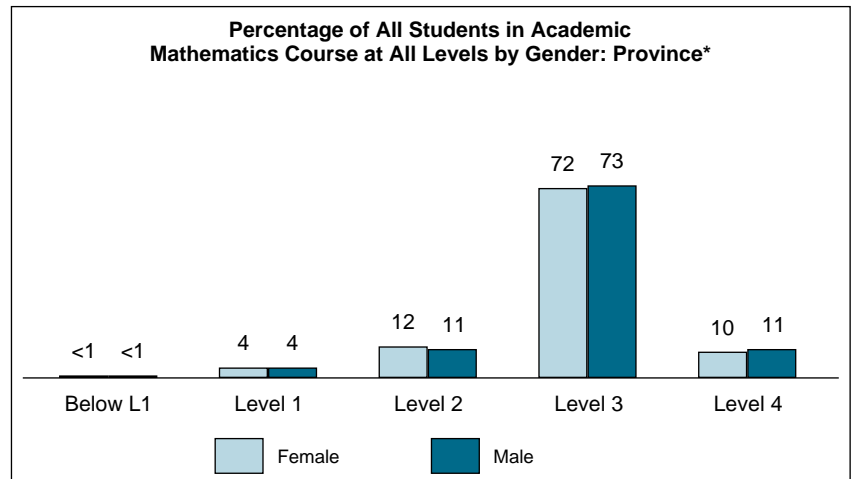
Grade 9 Assessment of Mathematics, 2010–2011, Academic Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 3 660		Male 3 786	
	#	%	#	%
Level 4	372	10%	478	13%
Level 3	2 707	74%	2 716	72%
Level 2	408	11%	418	11%
Level 1	154	4%	145	4%
Below Level 1	4	<1%	7	<1%
Participating Students	3 645	100%	3 764	99%
No Data	15	<1%	22	1%
At or Above Provincial Standard (Levels 3 and 4) †	84%		84%	



All Students: Province by Gender*				
Number of Students	Female 50 814		Male 48 464	
	#	%	#	%
Level 4	4 956	10%	5 558	11%
Level 3	36 788	72%	35 187	73%
Level 2	6 348	12%	5 131	11%
Level 1	2 206	4%	2 034	4%
Below Level 1	109	<1%	164	<1%
Participating Students	50 407	99%	48 074	99%
No Data	407	1%	390	1%
At or Above Provincial Standard (Levels 3 and 4) †	82%		84%	



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

## Grade 9 Assessment of Mathematics, 2010–2011

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

This information provides a context for interpreting the board's results of the current and previous administrations.

	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	
<b>Enrolment</b>						
Number of students in applied mathematics course	2 529	2 840	2 786	2 851	2 684	
Number of classes with students in applied mathematics course	161	174	168	171	163	
Number of schools with applied mathematics classes	32	33	35	34	33	
<b>Participation in the Assessment</b>						
Students who participated in the assessment	93%	93%	95%	96%	97%	
Participating students who received one or more accommodations*	22%	20%	22%	23%	24%	
Participating students who received one or more special provisions*	7%	6%	7%	6%	10%	
Students who did not complete any part of the assessment (no data)*	7%	7%	5%	4%	3%	
<b>Gender<sup>†</sup> Based on number of students enrolled</b>						
Female	44%	44%	45%	42%	45%	
Male	56%	56%	55%	58%	55%	
Gender not specified	0%	0%	0%	0%	0%	
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>						
English language learners*	10%	8%	8%	8%	12%	
Students with special education needs (excluding gifted)*	24%	23%	23%	24%	24%	
<b>Semester/Full Year Based on number of students enrolled</b>						
First-semester course	41%	47%	47%	46%	42%	
Second-semester course	49%	46%	45%	48%	49%	
Full-year course	10%	7%	8%	6%	8%	
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>						
	Number of Respondents:	2 241	2 538	2 535	2 594	2 343
Speak only or mostly a language other than English at home	11%	10%	9%	9%	11%	
Speak another language as often as English at home	17%	19%	19%	18%	21%	
Attended three or more elementary schools from kindergarten to Grade 8	55%	57%	57%	53%	56%	

\* See the Explanation of Terms.

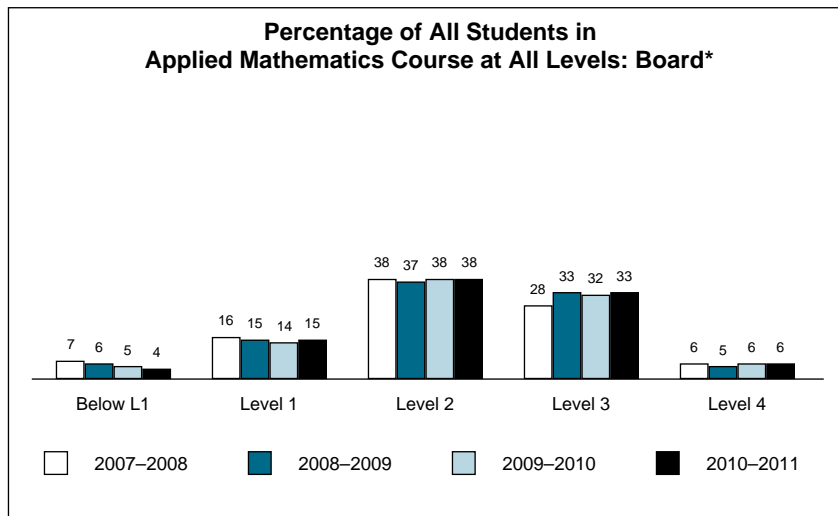
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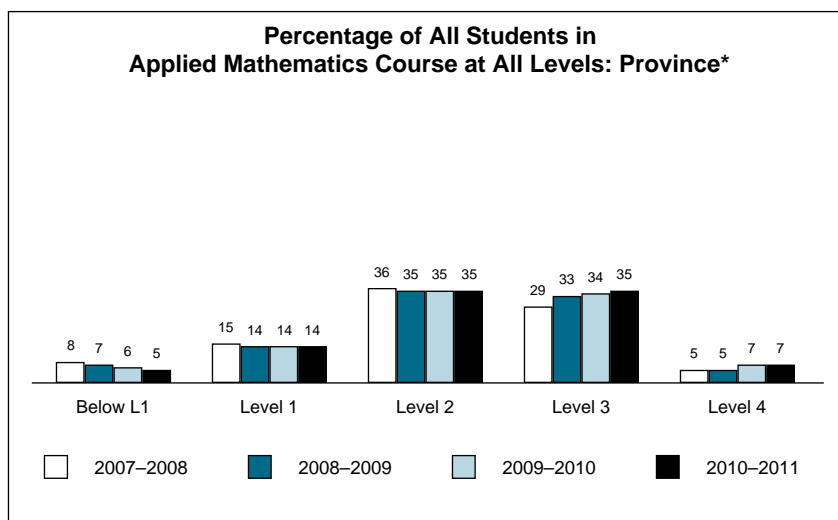
Results over Time, 2007–2008 to 2010–2011

Applied Mathematics Course for All Students

Board*				
Year	'07-'08	'08-'09	'09-'10	'10-'11
<i>Number of Students</i>	2 840	2 786	2 851	2 684
Level 4	6%	5%	6%	6%
Level 3	28%	33%	32%	33%
Level 2	38%	37%	38%	38%
Level 1	16%	15%	14%	15%
Below Level 1	7%	6%	5%	4%
<i>Participating Students</i>	93%	95%	96%	97%
No Data	7%	5%	4%	3%
At or Above Provincial Standard (Levels 3 and 4)†	33%	37%	39%	40%



Province*				
Year	'07-'08	'08-'09	'09-'10	'10-'11
<i>Number of Students</i>	47 817	48 482	47 566	44 095
Level 4	5%	5%	7%	7%
Level 3	29%	33%	34%	35%
Level 2	36%	35%	35%	35%
Level 1	15%	14%	14%	14%
Below Level 1	8%	7%	6%	5%
<i>Participating Students</i>	93%	94%	95%	95%
No Data	7%	6%	5%	5%
At or Above Provincial Standard (Levels 3 and 4)†	34%	38%	40%	42%



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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, 2010–2011

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

This information provides a context for interpreting the board's results of the current and previous administrations.

	2006–2007	2007–2008	2008–2009	2009–2010	2010–2011	
<b>Enrolment</b>						
Number of students in academic mathematics course	7 452	7 301	7 483	7 336	7 446	
Number of classes with students in academic mathematics course	297	291	293	283	309	
Number of schools with academic mathematics classes	29	30	30	30	30	
<b>Participation in the Assessment</b>						
Students who participated in the assessment	99%	100%	99%	99%	100%	
Participating students who received one or more accommodations*	2%	2%	3%	3%	3%	
Participating students who received one or more special provisions*	4%	3%	3%	3%	3%	
Students who did not complete any part of the assessment (no data)*	1%	<1%	1%	1%	<1%	
<b>Gender<sup>†</sup> Based on number of students enrolled</b>						
Female	50%	49%	49%	51%	49%	
Male	50%	51%	51%	49%	51%	
Gender not specified	0%	0%	0%	0%	0%	
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>						
English language learners*	5%	4%	4%	4%	4%	
Students with special education needs (excluding gifted)*	3%	3%	3%	3%	3%	
<b>Semester/Full Year Based on number of students enrolled</b>						
First-semester course	45%	46%	48%	47%	46%	
Second-semester course	45%	47%	47%	47%	46%	
Full-year course	10%	7%	6%	6%	8%	
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>						
	Number of Respondents:	7 172	7 073	7 226	7 015	7 112
Speak only or mostly a language other than English at home		13%	13%	13%	12%	13%
Speak another language as often as English at home		24%	26%	27%	29%	25%
Attended three or more elementary schools from kindergarten to Grade 8		55%	58%	55%	54%	54%

\* See the Explanation of Terms.

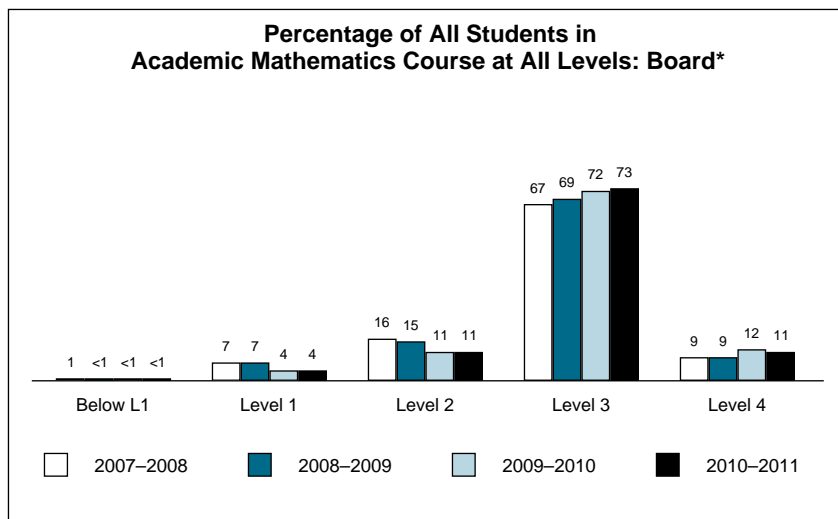
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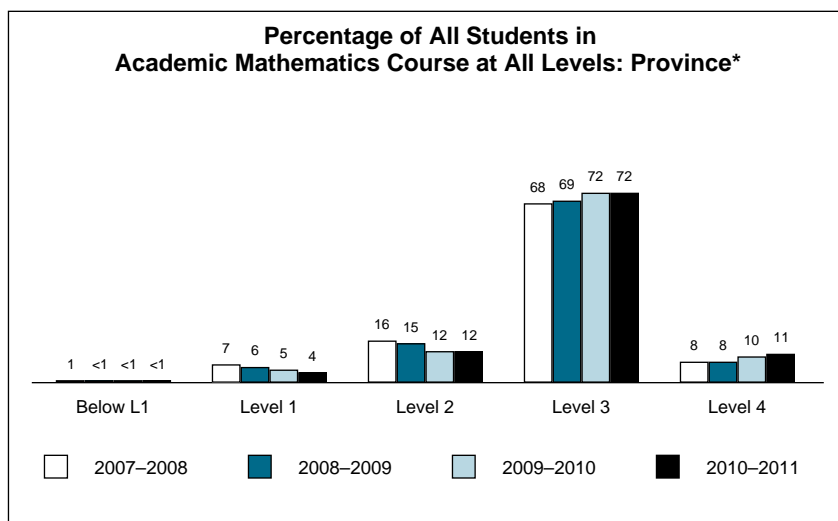
Results over Time, 2007–2008 to 2010–2011

Academic Mathematics Course for All Students

Board*				
Year	'07-'08	'08-'09	'09-'10	'10-'11
<i>Number of Students</i>	7 301	7 483	7 336	7 446
Level 4	9%	9%	12%	11%
Level 3	67%	69%	72%	73%
Level 2	16%	15%	11%	11%
Level 1	7%	7%	4%	4%
Below Level 1	1%	<1%	<1%	<1%
<i>Participating Students</i>	100%	99%	99%	100%
No Data	<1%	1%	1%	<1%
At or Above Provincial Standard (Levels 3 and 4)†	76%	78%	84%	84%



Province*				
Year	'07-'08	'08-'09	'09-'10	'10-'11
<i>Number of Students</i>	100 823	100 992	101 268	99 278
Level 4	8%	8%	10%	11%
Level 3	68%	69%	72%	72%
Level 2	16%	15%	12%	12%
Level 1	7%	6%	5%	4%
Below Level 1	1%	<1%	<1%	<1%
<i>Participating Students</i>	99%	99%	99%	99%
No Data	1%	1%	1%	1%
At or Above Provincial Standard (Levels 3 and 4)†	75%	77%	82%	83%

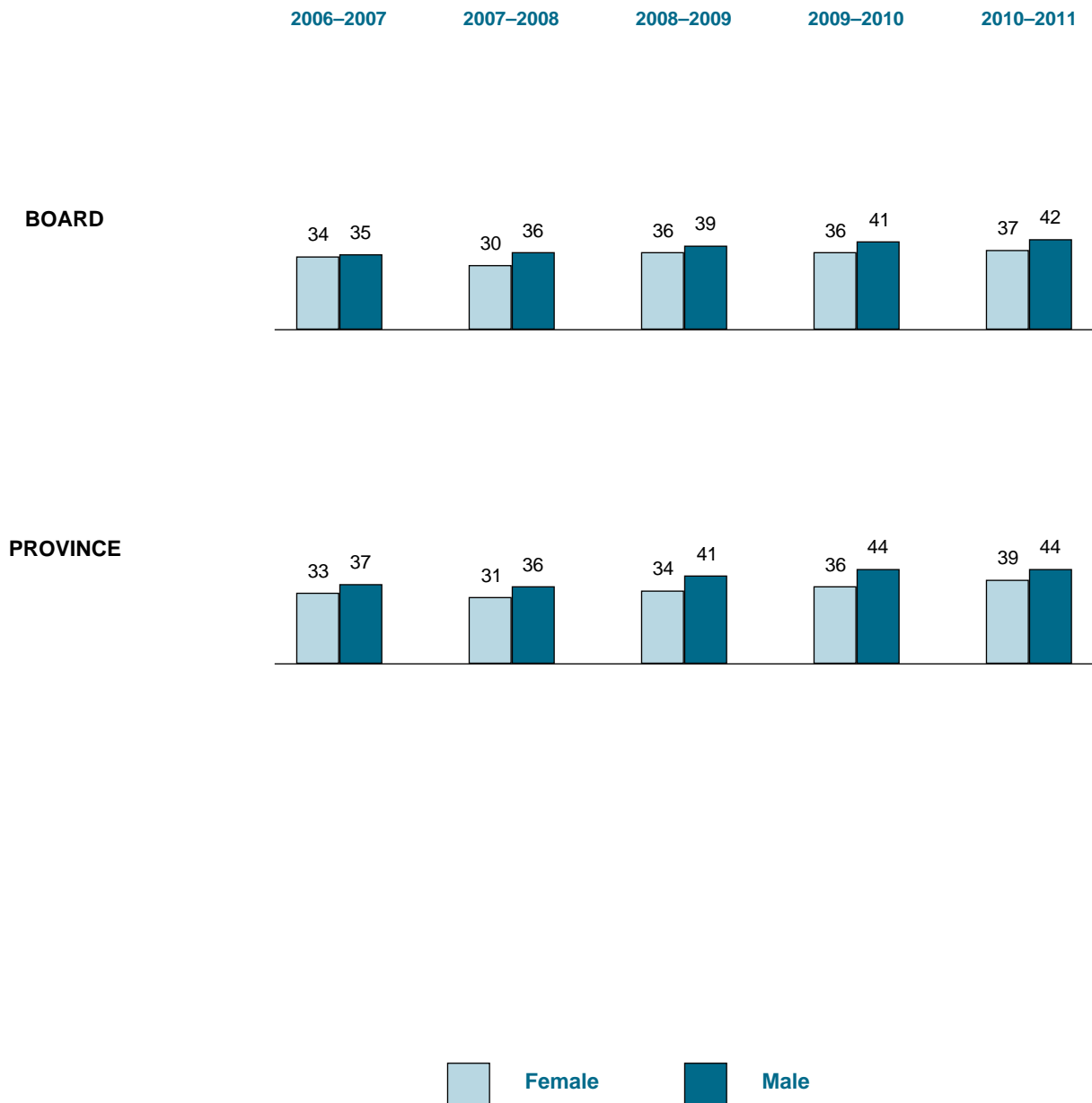


\* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

† 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**



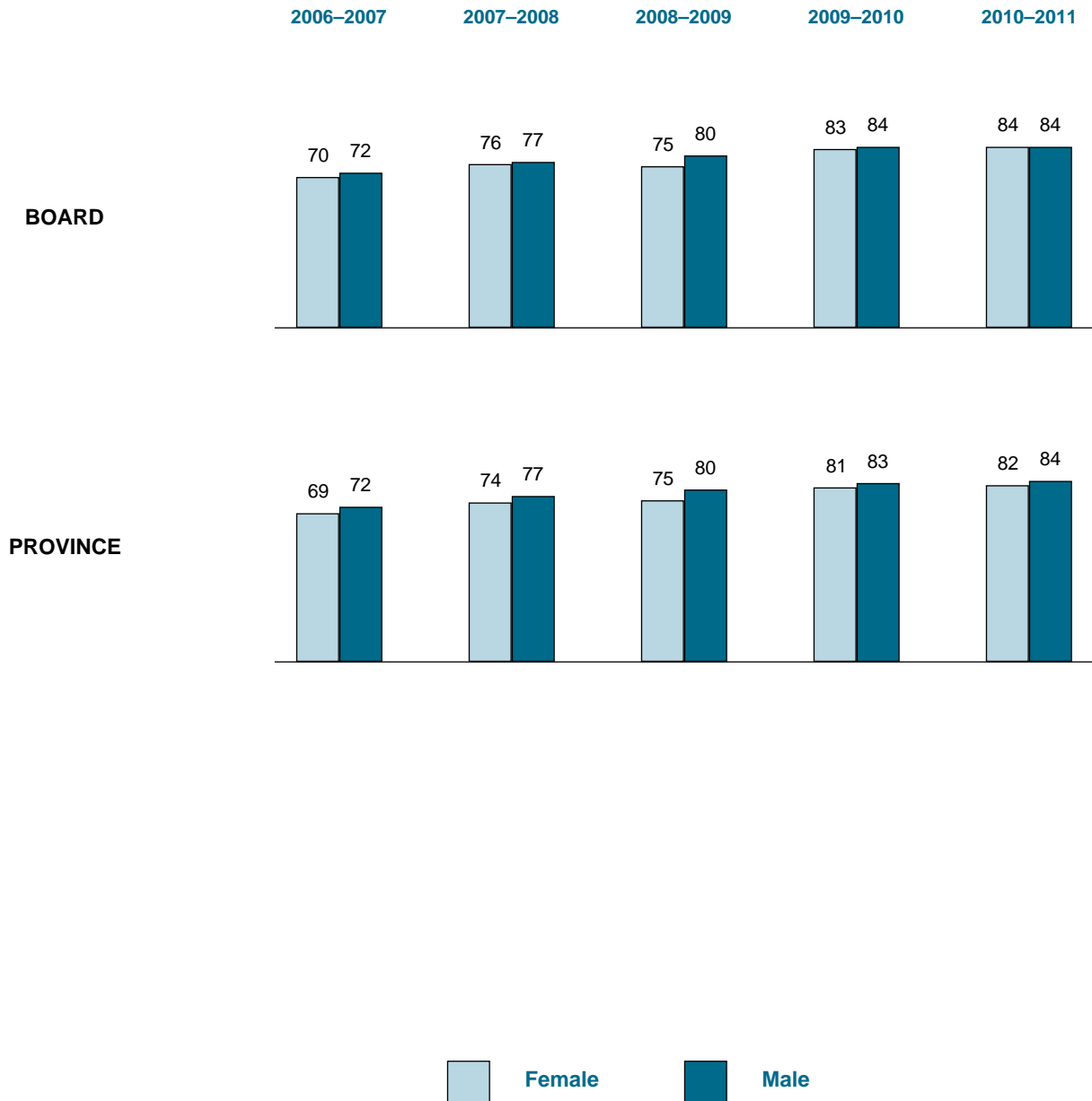
**Total Number of Students in Applied Mathematics Course†**

	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	1 106	1 423	1 249	1 591	1 263	1 523	1 211	1 640	1 209	1 475
Province	22 126	26 926	21 626	26 182	21 752	26 730	21 262	26 304	19 721	24 374

† 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†**

	2006-2007		2007-2008		2008-2009		2009-2010		2010-2011	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	3 744	3 708	3 584	3 717	3 683	3 800	3 727	3 609	3 660	3 786
Province	52 887	50 122	51 367	49 452	51 554	49 438	51 972	49 296	50 814	48 464

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2010–2011, Applied Course

**STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 343)**

Strongly Disagree/Disagree
  Neither agree nor disagree
  Agree/Strongly agree














STUDENTS' ATTITUDES TOWARD MATHEMATICS

How much do you agree or disagree with the following statements? Percentage of Students\* Number of students who answered "agree" or "strongly agree"

I like mathematics.		797
I am good at mathematics.		798
I am able to answer difficult mathematics questions.		529
Mathematics is one of my favourite subjects.		483
I understand most of the mathematics I am taught.		1471
Mathematics is an easy subject.		403
I try to do my best in mathematics class.		1809
The mathematics I learn now is useful for everyday life.		1050
The mathematics I learn now helps me do work in other subjects.		1132
I need to do well in mathematics to study what I want later.		1209
I need to keep taking mathematics for the kind of job I want after I leave school.		1011

\* 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, 2010–2011, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 343)		
DOING MATHEMATICS		
How much time do you usually spend on mathematics homework (in or out of school) on any given day?	Percentage of Students*	Number of students
I am not usually assigned any mathematics homework	 12	290
30 minutes or less	 41	962
Between 31 and 45 minutes	 29	680
More than 45 minutes	 10	243
How often do you complete your mathematics homework?	Percentage of Students*	Number of students
I am not usually assigned any mathematics homework	 7	170
Never or almost never	 10	230
Sometimes	 28	656
Often	 31	733
Always	 16	377
How often have you been absent from your Grade 9 mathematics class this year?	Percentage of Students*	Number of students
Never	 10	225
One to four times	 44	1028
Five to nine times	 22	513
10 or more times	 15	341

\* 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.

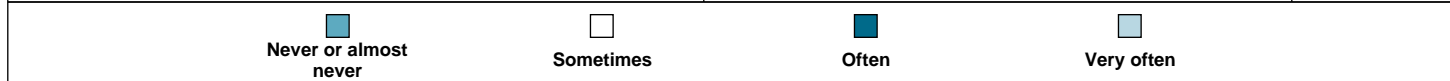
### Grade 9 Assessment of Mathematics, 2010–2011, Applied Course

## STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 343)



#### OUT-OF-SCHOOL ACTIVITIES













How often do you do the following when you are not at school?	Percentage of Students*	Number of students who answered "everyday or almost every day"
I read by myself.		440
I use the Internet.		1533
I participate in sports or other physical activities.		730
I participate in art, music, dance or drama activities.		432
I participate in other clubs or organizations.		214
I play video games.		570
I volunteer in my community.		131
I work at a paid job.		128
I do mathematics-related activities (e.g., doing mathematics puzzles, preparing for mathematics contests or competitions).		104



How often does a parent, a guardian or another adult at home do the following?	Percentage of Students*	Number of students who answered "very often"
discuss the work I do in school with me		327
discuss my future studies with me		353
discuss the different activities I do in school with me		247
help me with my mathematics homework		223
encourage me to try my best at school		1106
tell me what is expected of me in school (e.g., behaviour, effort)		805

\* 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, 2010–2011, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 343)		
EXPECTATIONS ABOUT YOUR FUTURE		
Do your parents or guardians expect you to continue your education after you finish secondary school?	Percentage of Students*	Number of students
Yes	 73	1700
No	 3	75
Don't know	 13	298
What is the highest level of education that you expect to complete?	Percentage of Students*	Number of students
Secondary-school diploma	 6	146
Vocational or technical training (e.g., college of applied arts and technology)	 19	437
Undergraduate university degree (e.g., bachelor's degree)	 14	332
Graduate or professional university degree (e.g., master's, doctorate or medical degree)	 23	540
Other	 8	186
Don't know	 18	413
USE OF THE ASSESSMENT IN CLASS MARKS		
Will your teacher count some or all parts of the Grade 9 Assessment of Mathematics as part of your class mark?	Percentage of Students*	Number of students
yes	 35	826
no	 5	109
don't know	 46	1085

\* 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, 2010–2011, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 343)	Female* (# = 1 067)	Male* (# = 1 276)	All Students (# = 38 230)	Female* (# = 17 306)	Male* (# = 20 924)
<b>STUDENTS' ATTITUDES TOWARD MATHEMATICS</b>						
Percentage of students indicating they "agree" or "strongly agree" with the following statements:†						
I like mathematics.	34%	27%	40%	33%	28%	37%
I am good at mathematics.	34%	25%	41%	36%	28%	42%
I am able to answer difficult mathematics questions.	23%	14%	30%	23%	15%	30%
Mathematics is one of my favourite subjects.	21%	16%	25%	21%	17%	24%
I understand most of the mathematics I am taught.	63%	58%	67%	61%	58%	64%
Mathematics is an easy subject.	17%	12%	22%	20%	15%	25%
I try to do my best in mathematics class.	77%	81%	74%	76%	80%	73%
The mathematics I learn now is useful for everyday life.	45%	41%	48%	41%	38%	44%
The mathematics I learn now helps me do work in other subjects.	48%	46%	50%	46%	46%	46%
I need to do well in mathematics to study what I want later.	52%	49%	54%	50%	48%	51%
I need to keep taking mathematics for the kind of job I want after I leave school.	43%	41%	45%	43%	41%	45%
<b>DOING MATHEMATICS</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:‡						
I am not usually assigned any mathematics homework	12%	12%	13%	20%	18%	21%
30 minutes or less	41%	39%	42%	42%	41%	42%
Between 31 and 45 minutes	29%	31%	27%	25%	27%	24%
More than 45 minutes	10%	11%	10%	8%	9%	8%
Percentage of students indicating they complete their mathematics homework at the following frequencies:‡						
I am not usually assigned any mathematics homework	7%	7%	7%	11%	10%	11%
Never or almost never	10%	7%	12%	11%	9%	13%
Sometimes	28%	28%	28%	28%	27%	29%
Often	31%	32%	31%	29%	30%	28%
Always	16%	19%	14%	16%	18%	14%

\* Only includes students for whom gender data were available.

† Other response options were "strongly disagree," "disagree" and "neither agree nor disagree."

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

### Grade 9 Assessment of Mathematics, 2010–2011, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 343)	Female* (# = 1 067)	Male* (# = 1 276)	All Students (# = 38 230)	Female* (# = 17 306)	Male* (# = 20 924)
<b>DOING MATHEMATICS (CONTINUED)</b>						
Percentage of students indicating they have been absent from their mathematics class this year at the following frequencies:†						
Never	10%	7%	12%	10%	8%	12%
One to four times	44%	45%	43%	44%	44%	44%
Five to nine times	22%	21%	23%	23%	24%	23%
10 or more times	15%	17%	12%	15%	16%	14%
<b>OUT-OF-SCHOOL ACTIVITIES</b>						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school:‡						
I read by myself.	19%	26%	13%	17%	23%	12%
I use the Internet.	65%	72%	60%	65%	71%	60%
I participate in sports or other physical activities.	31%	20%	41%	31%	23%	38%
I participate in art, music, dance or drama activities.	18%	24%	14%	17%	22%	13%
I participate in other clubs or organizations.	9%	7%	11%	8%	6%	10%
I play video games.	24%	9%	37%	25%	9%	39%
I volunteer in my community.	6%	5%	6%	5%	4%	6%
I work at a paid job.	5%	4%	7%	7%	5%	9%
I do mathematics-related activities (e.g., doing mathematics puzzles, preparing for mathematics contests or competitions).	4%	3%	6%	3%	2%	4%
Percentage of students indicating a parent, a guardian or another adult at home do the following “very often”: §						
discuss the work I do in school with me	14%	14%	14%	12%	12%	12%
discuss my future studies with me	15%	16%	14%	11%	12%	11%
discuss the different activities I do in school with me	11%	10%	11%	10%	10%	10%
help me with my mathematics homework	10%	8%	10%	9%	9%	9%
encourage me to try my best at school	47%	50%	45%	46%	49%	43%
tell me what is expected of me in school (e.g., behaviour, effort)	34%	34%	35%	31%	31%	31%

\* Only includes students for whom gender data were available.

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

‡ Other response options were “never,” “1 or 2 times a month” and “1 to 3 times a week.”

§ Other response options were “never or almost never,” “sometimes” and “often.”

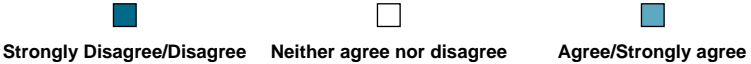
### Grade 9 Assessment of Mathematics, 2010–2011, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 2 343)	Female* (# = 1 067)	Male* (# = 1 276)	All Students (# = 38 230)	Female* (# = 17 306)	Male* (# = 20 924)
<b>EXPECTATIONS ABOUT YOUR FUTURE</b>						
Percentage of students indicating whether or not their parents or guardians expect them to continue their education after they finish secondary school:†						
Yes	73%	78%	68%	72%	77%	67%
No	3%	1%	5%	4%	2%	6%
Don't know	13%	11%	14%	16%	12%	18%
Percentage of students indicating the level of education they expect to complete:†						
Secondary-school diploma	6%	6%	7%	8%	6%	9%
Vocational or technical training (e.g., college of applied arts and technology)	19%	13%	23%	23%	18%	28%
Undergraduate university degree (e.g., bachelor's degree)	14%	14%	14%	11%	11%	12%
Graduate or professional university degree (e.g., master's, doctorate or medical degree)	23%	29%	18%	17%	22%	13%
Other	8%	9%	7%	10%	10%	10%
Don't know	18%	18%	17%	21%	23%	19%
<b>USE OF THE ASSESSMENT IN CLASS MARKS</b>						
Percentage of students indicating their teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark:†						
yes	35%	38%	33%	37%	38%	37%
no	5%	3%	6%	4%	3%	5%
don't know	46%	46%	47%	48%	48%	48%

\* Only includes students for whom gender data were available.














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

Grade 9 Assessment of Mathematics, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 112)				
				
STUDENTS' ATTITUDES TOWARD MATHEMATICS				
How much do you agree or disagree with the following statements?	Percentage of Students*		Number of students who answered "agree" or "strongly agree"	
I like mathematics.	18	28	54	3837
I am good at mathematics.	15	32	52	3711
I am able to answer difficult mathematics questions.	19	39	41	2926
Mathematics is one of my favourite subjects.	39	22	38	2697
I understand most of the mathematics I am taught.	7	18	74	5287
Mathematics is an easy subject.	35	36	28	1979
I try to do my best in mathematics class.	5	12	81	5795
The mathematics I learn now is useful for everyday life.	25	31	43	3089
The mathematics I learn now helps me do work in other subjects.	17	24	58	4120
I need to do well in mathematics to study what I want later.	10	20	68	4857
I need to keep taking mathematics for the kind of job I want after I leave school.	13	24	61	4361

\* 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, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 112)		
DOING MATHEMATICS		
How much time do you usually spend on mathematics homework (in or out of school) on any given day?	Percentage of Students*	Number of students
I am not usually assigned any mathematics homework	 2	109
30 minutes or less	 28	1971
Between 31 and 45 minutes	 39	2764
More than 45 minutes	 25	1780
How often do you complete your mathematics homework?	Percentage of Students*	Number of students
I am not usually assigned any mathematics homework	 1	67
Never or almost never	 6	458
Sometimes	 23	1618
Often	 36	2570
Always	 27	1898
How often have you been absent from your Grade 9 mathematics class this year?	Percentage of Students*	Number of students
Never	 16	1162
One to four times	 54	3872
Five to nine times	 14	1009
10 or more times	 5	387

\* 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, 2010–2011, Academic Course

**STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 112)**



**OUT-OF-SCHOOL ACTIVITIES**












How often do you do the following when you are not at school?	Percentage of Students*				Number of students who answered "everyday or almost every day"	
I read by myself.	12	24	27	27	1901	
I use the Internet.	13			73	5202	
I participate in sports or other physical activities.	7	15	33	34	2452	
I participate in art, music, dance or drama activities.	25	21	22	22	1538	
I participate in other clubs or organizations.	26	26	26	12	848	
I play video games.	23	22	25	19	1342	
I volunteer in my community.	29	37	18	5	328	
I work at a paid job.			70	7	8	206
I do mathematics-related activities (e.g., doing mathematics puzzles, preparing for mathematics contests or competitions).	48	25	11	4	271	



How often does a parent, a guardian or another adult at home do the following?	Percentage of Students*				Number of students who answered "very often"
discuss the work I do in school with me	12	30	26	17	1242
discuss my future studies with me	9	29	28	19	1328
discuss the different activities I do in school with me	14	32	25	13	947
help me with my mathematics homework	25	30	18	11	807
encourage me to try my best at school	9	21		51	3603
tell me what is expected of me in school (e.g., behaviour, effort)	8	16	25	36	2572

\* 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, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 112)		
EXPECTATIONS ABOUT YOUR FUTURE		
Do your parents or guardians expect you to continue your education after you finish secondary school?	Percentage of Students*	Number of students
Yes	 79	5614
No	 2	119
Don't know	 4	278
What is the highest level of education that you expect to complete?	Percentage of Students*	Number of students
Secondary-school diploma	 2	113
Vocational or technical training (e.g., college of applied arts and technology)	 4	299
Undergraduate university degree (e.g., bachelor's degree)	 14	1011
Graduate or professional university degree (e.g., master's, doctorate or medical degree)	 47	3322
Other	 3	194
Don't know	 13	933
USE OF THE ASSESSMENT IN CLASS MARKS		
Will your teacher count some or all parts of the Grade 9 Assessment of Mathematics as part of your class mark?	Percentage of Students*	Number of students
yes	 52	3688
no	 2	157
don't know	 26	1858

\* 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, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 7 112)	Female* (# = 3 509)	Male* (# = 3 603)	All Students (# = 93 257)	Female* (# = 48 047)	Male* (# = 45 210)
<b>STUDENTS' ATTITUDES TOWARD MATHEMATICS</b>						
Percentage of students indicating they "agree" or "strongly agree" with the following statements:†						
I like mathematics.	54%	46%	62%	51%	46%	57%
I am good at mathematics.	52%	44%	60%	53%	46%	60%
I am able to answer difficult mathematics questions.	41%	32%	50%	42%	33%	51%
Mathematics is one of my favourite subjects.	38%	31%	45%	36%	31%	41%
I understand most of the mathematics I am taught.	74%	72%	77%	73%	70%	75%
Mathematics is an easy subject.	28%	21%	34%	28%	23%	34%
I try to do my best in mathematics class.	81%	85%	78%	81%	86%	77%
The mathematics I learn now is useful for everyday life.	43%	39%	48%	39%	35%	43%
The mathematics I learn now helps me do work in other subjects.	58%	57%	59%	55%	54%	57%
I need to do well in mathematics to study what I want later.	68%	64%	73%	63%	60%	65%
I need to keep taking mathematics for the kind of job I want after I leave school.	61%	57%	66%	57%	54%	60%
<b>DOING MATHEMATICS</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:‡						
I am not usually assigned any mathematics homework	2%	1%	2%	3%	2%	4%
30 minutes or less	28%	23%	32%	32%	27%	38%
Between 31 and 45 minutes	39%	42%	36%	39%	42%	36%
More than 45 minutes	25%	28%	22%	20%	24%	17%
Percentage of students indicating they complete their mathematics homework at the following frequencies:‡						
I am not usually assigned any mathematics homework	1%	1%	1%	1%	1%	2%
Never or almost never	6%	4%	9%	8%	5%	10%
Sometimes	23%	20%	26%	24%	21%	27%
Often	36%	37%	35%	35%	36%	35%
Always	27%	32%	22%	26%	31%	21%

\* Only includes students for whom gender data were available.

† Other response options were "strongly disagree," "disagree" and "neither agree nor disagree."

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

### Grade 9 Assessment of Mathematics, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 7 112)	Female* (# = 3 509)	Male* (# = 3 603)	All Students (# = 93 257)	Female* (# = 48 047)	Male* (# = 45 210)
<b>DOING MATHEMATICS (CONTINUED)</b>						
Percentage of students indicating they have been absent from their mathematics class this year at the following frequencies:†						
Never	16%	14%	18%	13%	11%	15%
One to four times	54%	57%	52%	54%	55%	52%
Five to nine times	14%	14%	14%	19%	19%	18%
10 or more times	5%	5%	6%	7%	7%	7%
<b>OUT-OF-SCHOOL ACTIVITIES</b>						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school:‡						
I read by myself.	27%	35%	19%	26%	33%	18%
I use the Internet.	73%	75%	71%	73%	76%	70%
I participate in sports or other physical activities.	34%	26%	42%	37%	31%	43%
I participate in art, music, dance or drama activities.	22%	28%	15%	20%	24%	15%
I participate in other clubs or organizations.	12%	11%	13%	10%	10%	11%
I play video games.	19%	5%	32%	20%	5%	36%
I volunteer in my community.	5%	4%	5%	4%	4%	4%
I work at a paid job.	3%	2%	4%	4%	3%	5%
I do mathematics-related activities (e.g., doing mathematics puzzles, preparing for mathematics contests or competitions).	4%	3%	5%	3%	2%	4%
Percentage of students indicating a parent, a guardian or another adult at home do the following “very often”: §						
discuss the work I do in school with me	17%	18%	17%	16%	17%	15%
discuss my future studies with me	19%	19%	18%	14%	15%	13%
discuss the different activities I do in school with me	13%	14%	13%	13%	14%	11%
help me with my mathematics homework	11%	11%	11%	9%	9%	9%
encourage me to try my best at school	51%	52%	49%	50%	53%	47%
tell me what is expected of me in school (e.g., behaviour, effort)	36%	34%	38%	32%	31%	34%

\* Only includes students for whom gender data were available.

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

‡ Other response options were “never,” “1 or 2 times a month” and “1 to 3 times a week.”

§ Other response options were “never or almost never,” “sometimes” and “often.”

### Grade 9 Assessment of Mathematics, 2010–2011, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province			
	All Students (# = 7 112)	Female* (# = 3 509)	Male* (# = 3 603)	All Students (# = 93 257)	Female* (# = 48 047)	Male* (# = 45 210)	
<b>EXPECTATIONS ABOUT YOUR FUTURE</b>							
Percentage of students indicating whether or not their parents or guardians expect them to continue their education after they finish secondary school:†							
Yes	79%	81%	77%	82%	84%	79%	
No	2%	1%	2%	2%	1%	2%	
Don't know	4%	3%	5%	5%	4%	7%	
Percentage of students indicating the level of education they expect to complete:†							
Secondary-school diploma	2%	1%	2%	2%	1%	3%	
Vocational or technical training (e.g., college of applied arts and technology)	4%	3%	5%	6%	4%	8%	
Undergraduate university degree (e.g., bachelor's degree)	14%	13%	15%	16%	15%	17%	
Graduate or professional university degree (e.g., master's, doctorate or medical degree)	47%	48%	45%	43%	46%	40%	
Other	3%	3%	3%	3%	3%	4%	
Don't know	13%	14%	12%	17%	17%	16%	
<b>USE OF THE ASSESSMENT IN CLASS MARKS</b>							
Percentage of students indicating their teacher will count some or all parts of the Grade 9 Assessment of Mathematics as part of their class mark:†							
yes	52%	54%	50%	57%	59%	54%	
no	2%	2%	3%	2%	2%	3%	
don't know	26%	25%	28%	26%	25%	28%	

\* Only includes students for whom gender data were available.

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

## Grade 9 Assessment of Mathematics, 2010–2011

## 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>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 Education 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 whose sole identified exceptionality is giftedness are not included.
<b>Students Receiving One or More Accommodations</b>	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> .
<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 are being withheld by EQAO. For further information, please contact personnel at the board.