



School Board Report



Grade 9 Assessment of Mathematics, 2012–2013

Board: Windsor-Essex Catholic DSB (67024)

On behalf of EQAO, I am pleased to provide you with the results of the 2012–2013 Grade 9 Assessment of Mathematics.

This report provides the 2013 school and board results as well as results for previous years, so you can track progress over time. You'll also find demographic and attitudinal information about schools, which provides context for a deeper analysis of the achievement results.

By assessing all students in our education system at key stages in their schooling, EQAO is able to provide reliable and objective data at the individual student, school and board levels. EQAO data continue to inform board improvement planning strategies and provide important evidence of learning at the local school level. This evidence helps educators and parents engage in meaningful conversations about student achievement. The data also allow school communities to identify strengths and opportunities for improvement so they can continue to make evidence-based decisions in their planning.

We continue to advocate the use of EQAO data in combination with classroom-generated results and other information sources to develop strategies and action plans that will make a measurable difference in learning outcomes.

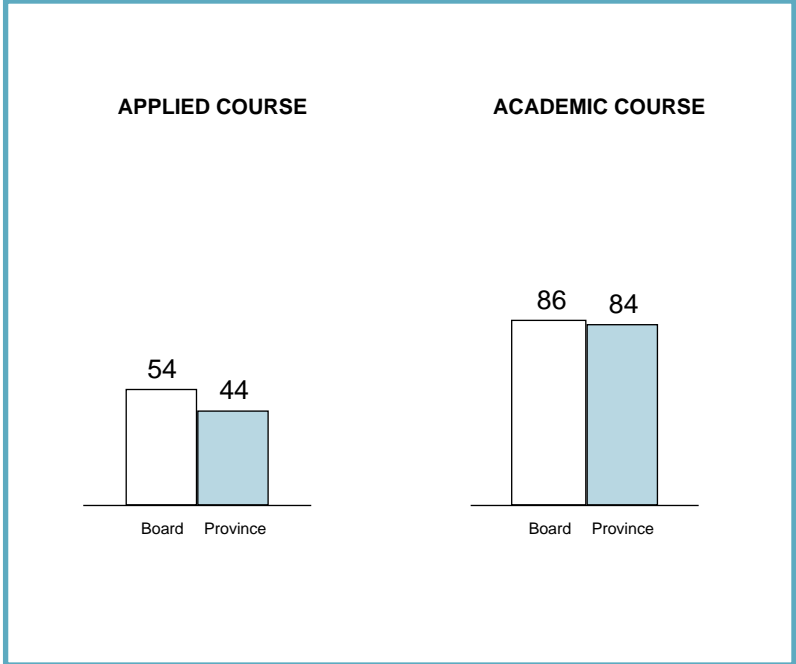
At EQAO, we are pleased to continue our partnership with you as you help students reach their full potential. I trust you will continue to find our reports to be a rich source of information as you turn knowledge into action for the benefit of your students and community.

Sincerely,

Bruce Rodrigues
 Chief Executive Officer
 Education Quality and Accountability Office

WHERE TO FIND . . .	PAGE	
	Applied	Academic
Percentages of all students at or above the provincial standard		
• 2012–2013.....	1	1
• Over time.....	2	2
Tips for using this report.....	3	3
Contextual information: 2012–2013.....	4	7
Results for groups of students: 2012–2013		
• All students.....	5	8
• Participating students.....	5	8
• Students by gender.....	6	9
Contextual information: Over time.....	10	12
Results for all students: Over time.....	11	13
Results for all students: Over time by gender.....	14	15
Student questionnaire results.....	16–24	25–33
Explanation of terms.....	34	34

PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4), 2012–2013



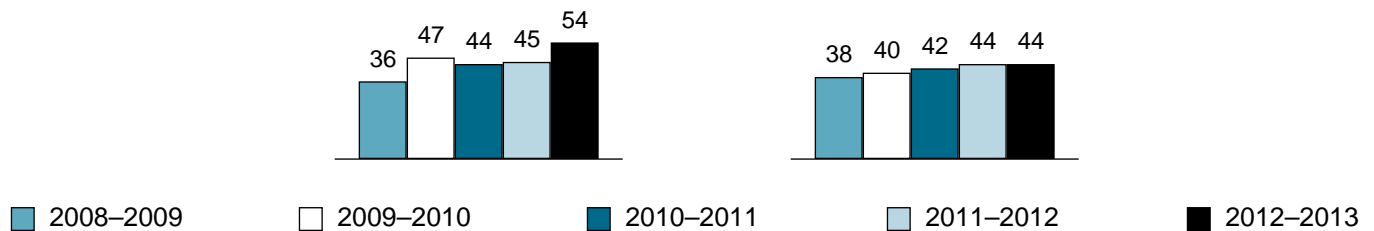
Grade 9 Assessment of Mathematics, 2012–2013

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

APPLIED MATHEMATICS

Board

Province



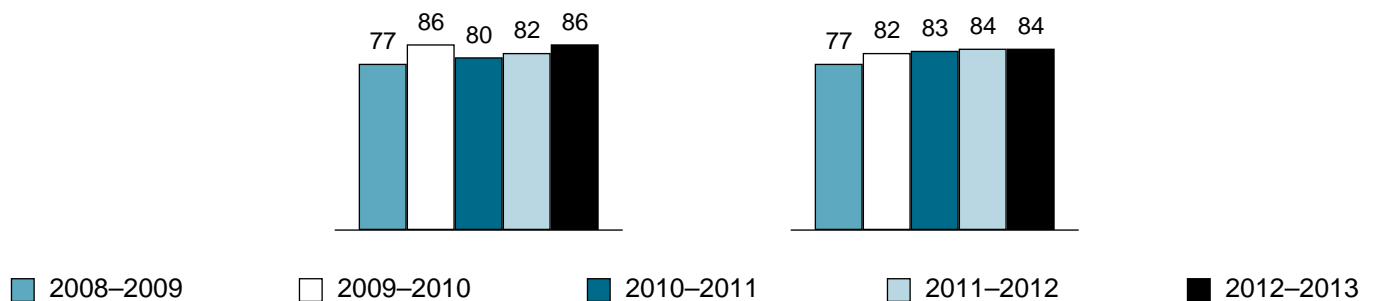
Total Number of Students

	<u>2008–2009</u>	<u>2009–2010</u>	<u>2010–2011</u>	<u>2011–2012</u>	<u>2012–2013</u>
Board	719	671	618	583	504
Province	48 482	47 566	44 095	41 799	39 881

ACADEMIC MATHEMATICS

Board

Province



Total Number of Students

	<u>2008–2009</u>	<u>2009–2010</u>	<u>2010–2011</u>	<u>2011–2012</u>	<u>2012–2013</u>
Board	1 290	1 278	1 249	1 150	1 181
Province	100 992	101 268	99 278	97 741	97 158

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 10 students fully participated in 2012-2013, or fewer than 15 students fully participated prior to 2012-2013 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.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

Contextual Information

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

	Board		Province	
Enrolment				
Number of students in applied mathematics course	504		39 881	
Number of classes with students in applied mathematics course	26		2 610	
Number of schools with applied mathematics classes	8		721	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	498	99%	38 215	96%
Participating students who received one or more accommodations*	109	22%	11 333	30%
Participating students who received one or more special provisions*	26	5%	1 846	5%
Students who did not complete any part of the assessment (no data)*	6	1%	1 666	4%
Gender[†] Based on number of students enrolled				
Female	227	45%	17 695	44%
Male	277	55%	22 181	56%
Gender not specified	0	0%	5	<1%
Student Status[†] Based on number of students enrolled				
English language learners*	29	6%	3 173	8%
Students with special education needs (excluding gifted)*	148	29%	14 361	36%
Semester/Full Year Based on number of students enrolled				
First-semester course	190	38%	18 240	46%
Second-semester course	280	56%	18 430	46%
Full-year course	34	7%	3 211	8%
Language and School Background^{††}				
<i>Based on Student Questionnaire data</i>				
	Number of Respondents:		33 705	
Speak only or mostly a language other than English at home	32	7%	2 148	6%
Speak another language as often as English at home	52	12%	4 288	13%
Attended three or more elementary schools from kindergarten to Grade 8	128	29%	14 299	42%

* See the Explanation of Terms.

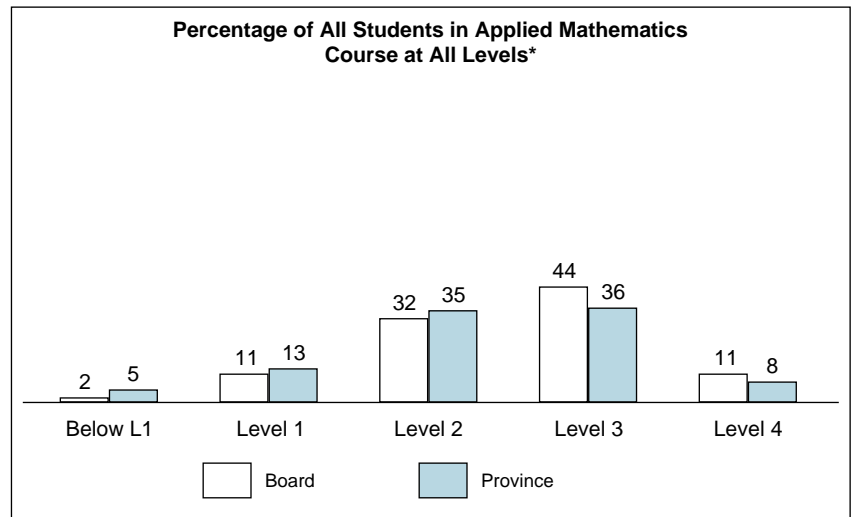
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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, 2012–2013, Applied Course

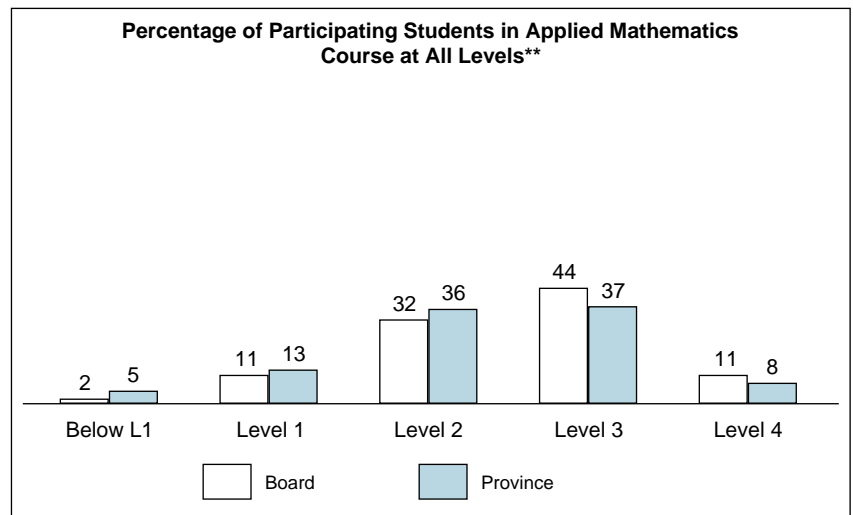
Results for All Students

All Students*			
Number of Students	Board 504		Province 39 881
	#	%	%
Level 4	53	11%	8%
Level 3	220	44%	36%
Level 2	161	32%	35%
Level 1	55	11%	13%
Below Level 1	9	2%	5%
Participating Students	498	99%	96%
No Data	6	1%	4%
At or Above Provincial Standard (Levels 3 and 4) †	54%		44%



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

Participating Students**			
Number of Students	Board 498		Province 38 215
	#	%	%
Level 4	53	11%	8%
Level 3	220	44%	37%
Level 2	161	32%	36%
Level 1	55	11%	13%
Below Level 1	9	2%	5%
At or Above Provincial Standard (Levels 3 and 4) †	55%		45%



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

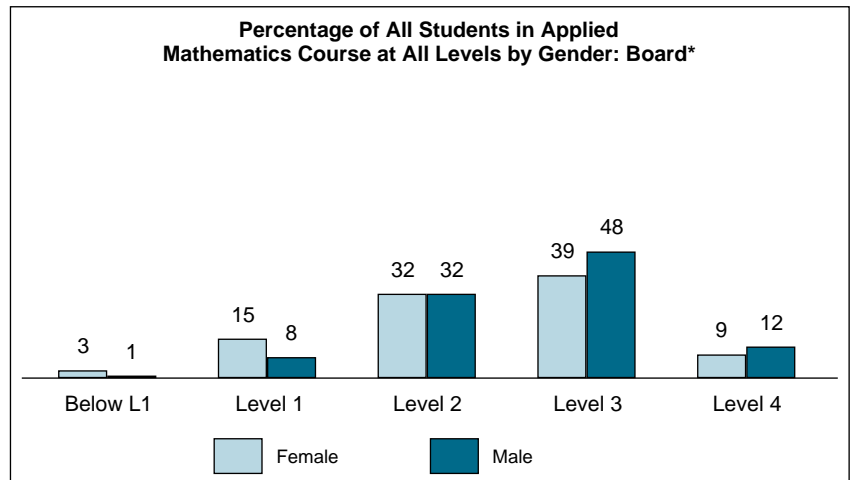
** Because percentages in tables and graphs are rounded, percentages may not add to 100.

† 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.

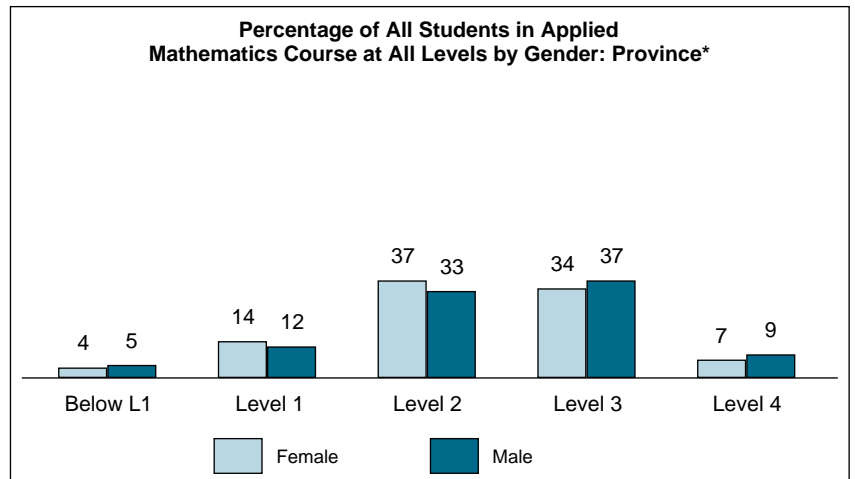
Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 227		Male 277	
	#	%	#	%
Level 4	20	9%	33	12%
Level 3	88	39%	132	48%
Level 2	73	32%	88	32%
Level 1	34	15%	21	8%
Below Level 1	7	3%	2	1%
Participating Students	222	98%	276	100%
No Data	5	2%	1	<1%
At or Above Provincial Standard (Levels 3 and 4) †	48%		60%	



All Students: Province by Gender*				
Number of Students	Female 17 695		Male 22 181	
	#	%	#	%
Level 4	1 182	7%	1 989	9%
Level 3	6 060	34%	8 141	37%
Level 2	6 555	37%	7 345	33%
Level 1	2 443	14%	2 699	12%
Below Level 1	728	4%	1 068	5%
Participating Students	16 968	96%	21 242	96%
No Data	727	4%	939	4%
At or Above Provincial Standard (Levels 3 and 4) †	41%		46%	



* 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, 2012–2013, Academic Course

Contextual Information

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

	Board		Province	
Enrolment				
Number of students in academic mathematics course	1 181		97 158	
Number of classes with students in academic mathematics course	45		4 080	
Number of schools with academic mathematics classes	8		686	
Number Percent Number Percent				
Participation in the Assessment				
Students who participated in the assessment	1 180	100%	96 375	99%
Participating students who received one or more accommodations*	19	2%	4 816	5%
Participating students who received one or more special provisions*	30	3%	3 286	3%
Students who did not complete any part of the assessment (no data)*	1	<1%	783	1%
Gender[†] Based on number of students enrolled				
Female	609	52%	49 986	51%
Male	572	48%	47 171	49%
Gender not specified	0	0%	1	<1%
Student Status[†] Based on number of students enrolled				
English language learners*	40	3%	6 127	6%
Students with special education needs (excluding gifted)*	39	3%	5 747	6%
Semester/Full Year Based on number of students enrolled				
First-semester course	614	52%	43 236	45%
Second-semester course	567	48%	42 502	44%
Full-year course	0	0%	11 420	12%
Language and School Background^{††} Based on Student Questionnaire data				
Number of Respondents:		1 086	88 883	
Speak only or mostly a language other than English at home	75	7%	7 885	9%
Speak another language as often as English at home	126	12%	14 023	16%
Attended three or more elementary schools from kindergarten to Grade 8	165	15%	33 299	37%

* See the Explanation of Terms.

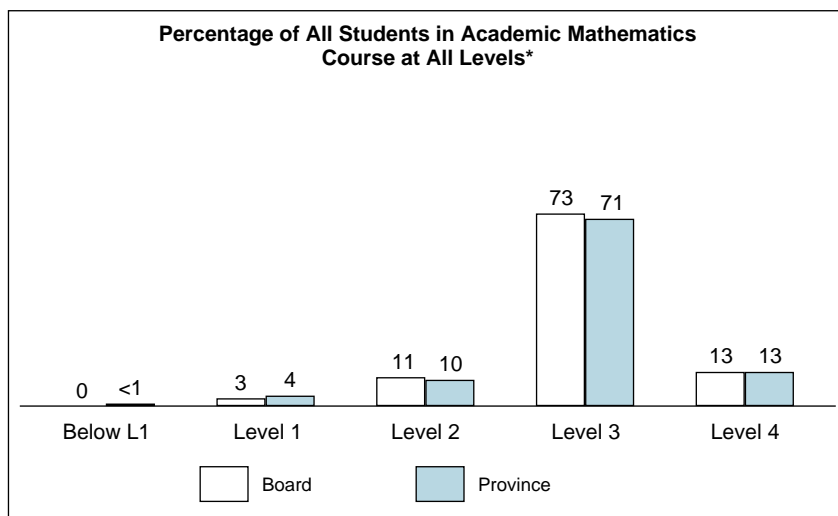
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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, 2012–2013, Academic Course

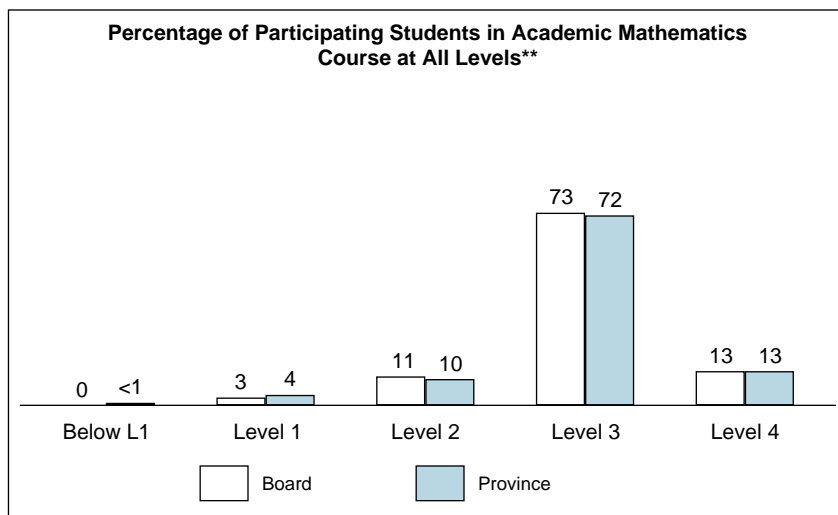
Results for All Students

All Students*			
Number of Students	Board 1 181		Province 97 158
	#	%	%
Level 4	151	13%	13%
Level 3	861	73%	71%
Level 2	135	11%	10%
Level 1	33	3%	4%
Below Level 1	0	0%	<1%
Participating Students	1 180	100%	99%
No Data	1	<1%	1%
At or Above Provincial Standard (Levels 3 and 4) †		86%	84%



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

Participating Students**			
Number of Students	Board 1 180		Province 96 375
	#	%	%
Level 4	151	13%	13%
Level 3	861	73%	72%
Level 2	135	11%	10%
Level 1	33	3%	4%
Below Level 1	0	0%	<1%
At or Above Provincial Standard (Levels 3 and 4) †		86%	85%



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

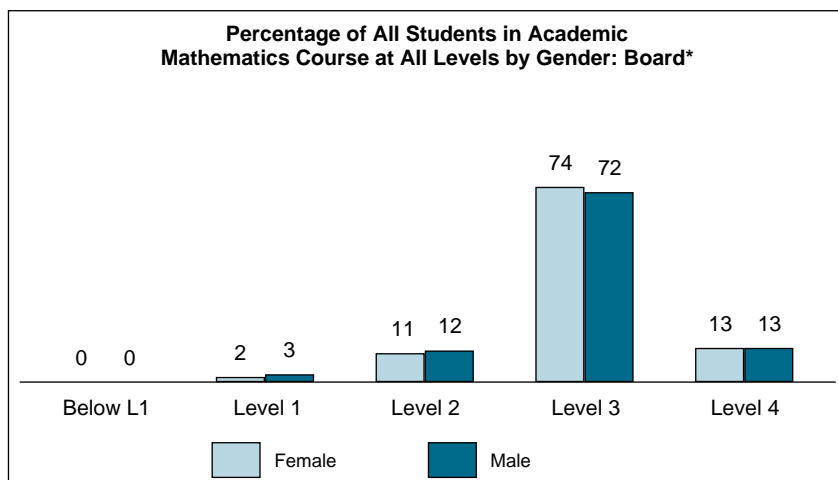
** Because percentages in tables and graphs are rounded, percentages may not add to 100.

† 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.

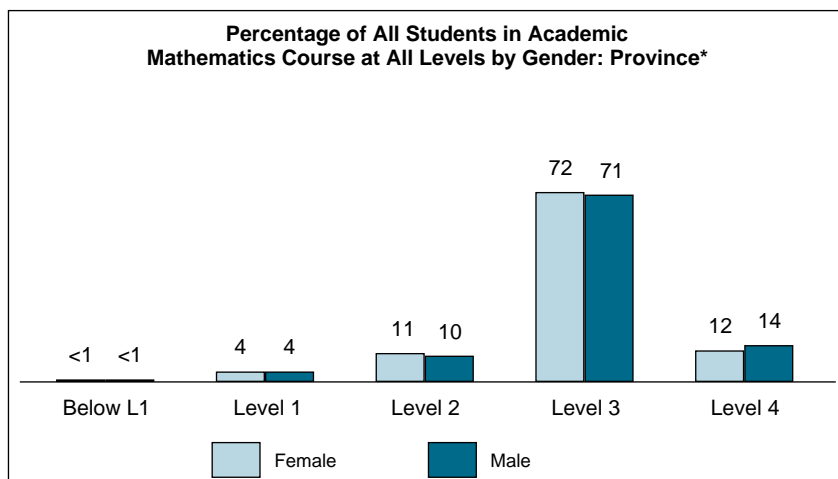
Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

Results by Gender††

All Students: Board by Gender*				
Number of Students	Female 609		Male 572	
	#	%	#	%
Level 4	77	13%	74	13%
Level 3	450	74%	411	72%
Level 2	66	11%	69	12%
Level 1	15	2%	18	3%
Below Level 1	0	0%	0	0%
Participating Students	608	100%	572	100%
No Data	1	<1%	0	0%
At or Above Provincial Standard (Levels 3 and 4) †	87%		85%	



All Students: Province by Gender*				
Number of Students	Female 49 986		Male 47 171	
	#	%	#	%
Level 4	5 996	12%	6 587	14%
Level 3	35 861	72%	33 540	71%
Level 2	5 430	11%	4 640	10%
Level 1	2 172	4%	1 901	4%
Below Level 1	103	<1%	144	<1%
Participating Students	49 562	99%	46 812	99%
No Data	424	1%	359	1%
At or Above Provincial Standard (Levels 3 and 4) †	84%		85%	



* 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, 2012–2013

Contextual Information over Time: Applied Mathematics Course

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

	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	
Enrolment						
Number of students in applied mathematics course	719	671	618	583	504	
Number of classes with students in applied mathematics course	32	32	30	29	26	
Number of schools with applied mathematics classes	8	8	8	8	8	
Participation in the Assessment						
Students who participated in the assessment	97%	98%	98%	98%	99%	
Participating students who received one or more accommodations*	19%	17%	23%	23%	22%	
Participating students who received one or more special provisions*	0%	3%	5%	3%	5%	
Students who did not complete any part of the assessment (no data)*	3%	2%	2%	2%	1%	
Gender[†] Based on number of students enrolled						
Female	48%	49%	49%	44%	45%	
Male	52%	51%	51%	56%	55%	
Gender not specified	0%	0%	0%	0%	0%	
Student Status[†] Based on number of students enrolled						
English language learners*	2%	3%	7%	3%	6%	
Students with special education needs (excluding gifted)*	26%	27%	29%	30%	29%	
Semester/Full Year Based on number of students enrolled						
First-semester course	44%	51%	46%	51%	38%	
Second-semester course	53%	47%	45%	45%	56%	
Full-year course	2%	3%	9%	4%	7%	
Language and School Background^{††} Based on Student Questionnaire data						
	Number of Respondents:	657	635	574	508	439
Speak only or mostly a language other than English at home	6%	5%	7%	6%	7%	
Speak another language as often as English at home	10%	14%	13%	14%	12%	
Attended three or more elementary schools from kindergarten to Grade 8	25%	28%	31%	29%	29%	

* See the Explanation of Terms.

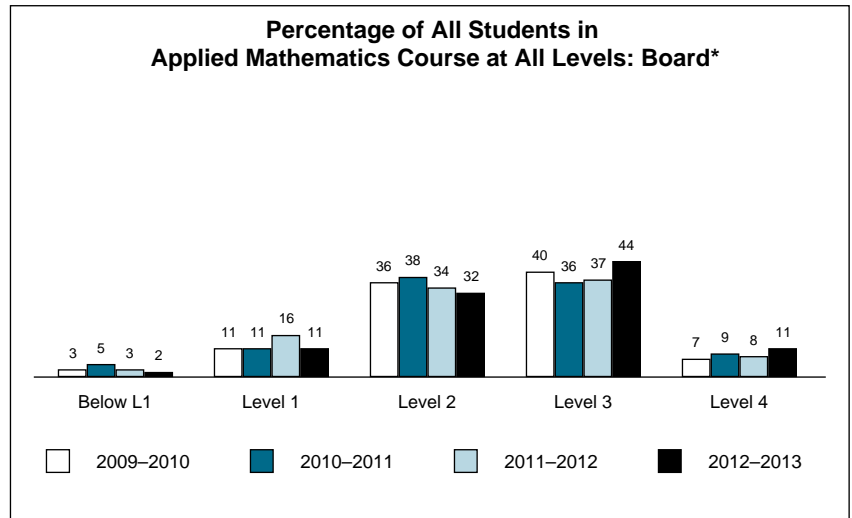
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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.

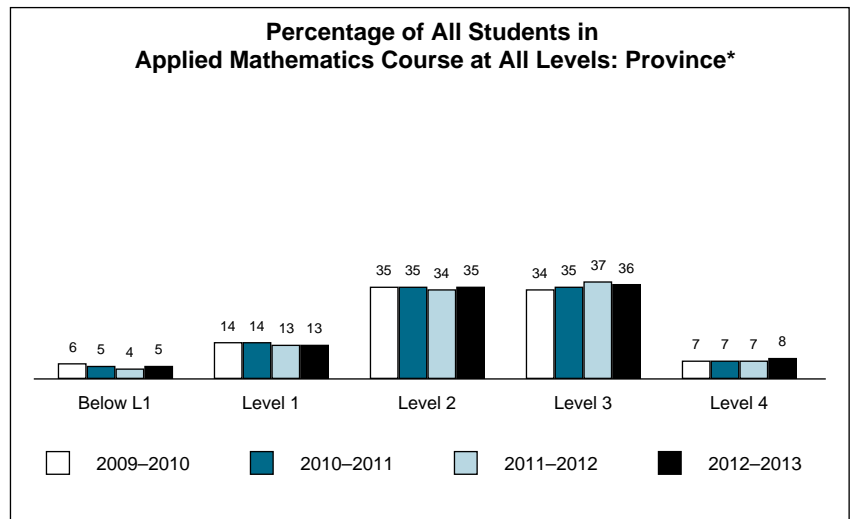
Results over Time, 2009–2010 to 2012–2013

Applied Mathematics Course for All Students

Board*				
Year	'09-'10	'10-'11	'11-'12	'12-'13
<i>Number of Students</i>	671	618	583	504
Level 4	7%	9%	8%	11%
Level 3	40%	36%	37%	44%
Level 2	36%	38%	34%	32%
Level 1	11%	11%	16%	11%
Below Level 1	3%	5%	3%	2%
<i>Participating Students</i>	98%	98%	98%	99%
No Data	2%	2%	2%	1%
At or Above Provincial Standard (Levels 3 and 4)†	47%	44%	45%	54%



Province*				
Year	'09-'10	'10-'11	'11-'12	'12-'13
<i>Number of Students</i>	47 566	44 095	41 799	39 881
Level 4	7%	7%	7%	8%
Level 3	34%	35%	37%	36%
Level 2	35%	35%	34%	35%
Level 1	14%	14%	13%	13%
Below Level 1	6%	5%	4%	5%
<i>Participating Students</i>	95%	95%	95%	96%
No Data	5%	5%	5%	4%
At or Above Provincial Standard (Levels 3 and 4)†	40%	42%	44%	44%



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

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

Grade 9 Assessment of Mathematics, 2012–2013

Contextual Information over Time: Academic Mathematics Course

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

	2008–2009	2009–2010	2010–2011	2011–2012	2012–2013	
Enrolment						
Number of students in academic mathematics course	1 290	1 278	1 249	1 150	1 181	
Number of classes with students in academic mathematics course	46	47	46	44	45	
Number of schools with academic mathematics classes	8	8	8	8	8	
Participation in the Assessment						
Students who participated in the assessment	99%	99%	99%	99%	100%	
Participating students who received one or more accommodations*	2%	2%	2%	3%	2%	
Participating students who received one or more special provisions*	0%	<1%	1%	2%	3%	
Students who did not complete any part of the assessment (no data)*	1%	1%	1%	1%	<1%	
Gender[†] Based on number of students enrolled						
Female	51%	52%	51%	52%	52%	
Male	49%	48%	49%	48%	48%	
Gender not specified	0%	0%	0%	0%	0%	
Student Status[†] Based on number of students enrolled						
English language learners*	1%	1%	3%	3%	3%	
Students with special education needs (excluding gifted)*	2%	3%	2%	3%	3%	
Semester/Full Year Based on number of students enrolled						
First-semester course	51%	49%	48%	43%	52%	
Second-semester course	49%	51%	52%	57%	48%	
Full-year course	0%	0%	0%	0%	0%	
Language and School Background^{††} Based on Student Questionnaire data						
	Number of Respondents:	1 214	1 237	1 149	1 065	1 086
Speak only or mostly a language other than English at home	6%	4%	7%	6%	7%	
Speak another language as often as English at home	12%	13%	13%	13%	12%	
Attended three or more elementary schools from kindergarten to Grade 8	19%	18%	19%	20%	15%	

* See the Explanation of Terms.

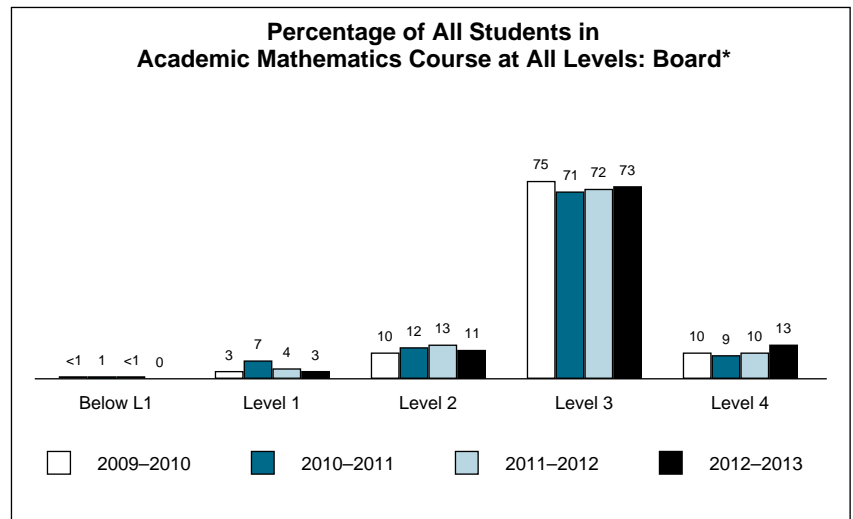
† Contextual data pertaining to “gender” and “student status” are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

†† 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.

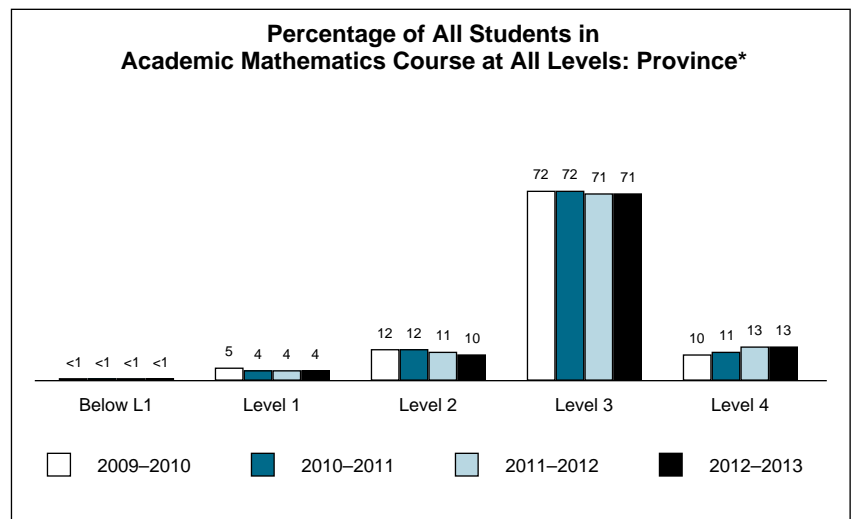
Results over Time, 2009–2010 to 2012–2013

Academic Mathematics Course for All Students

Board*				
Year	'09-'10	'10-'11	'11-'12	'12-'13
<i>Number of Students</i>	1 278	1 249	1 150	1 181
Level 4	10%	9%	10%	13%
Level 3	75%	71%	72%	73%
Level 2	10%	12%	13%	11%
Level 1	3%	7%	4%	3%
Below Level 1	<1%	1%	<1%	0%
<i>Participating Students</i>	99%	99%	99%	100%
No Data	1%	1%	1%	<1%
At or Above Provincial Standard (Levels 3 and 4)†	86%	80%	82%	86%



Province*				
Year	'09-'10	'10-'11	'11-'12	'12-'13
<i>Number of Students</i>	101 268	99 278	97 741	97 158
Level 4	10%	11%	13%	13%
Level 3	72%	72%	71%	71%
Level 2	12%	12%	11%	10%
Level 1	5%	4%	4%	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)†	82%	83%	84%	84%

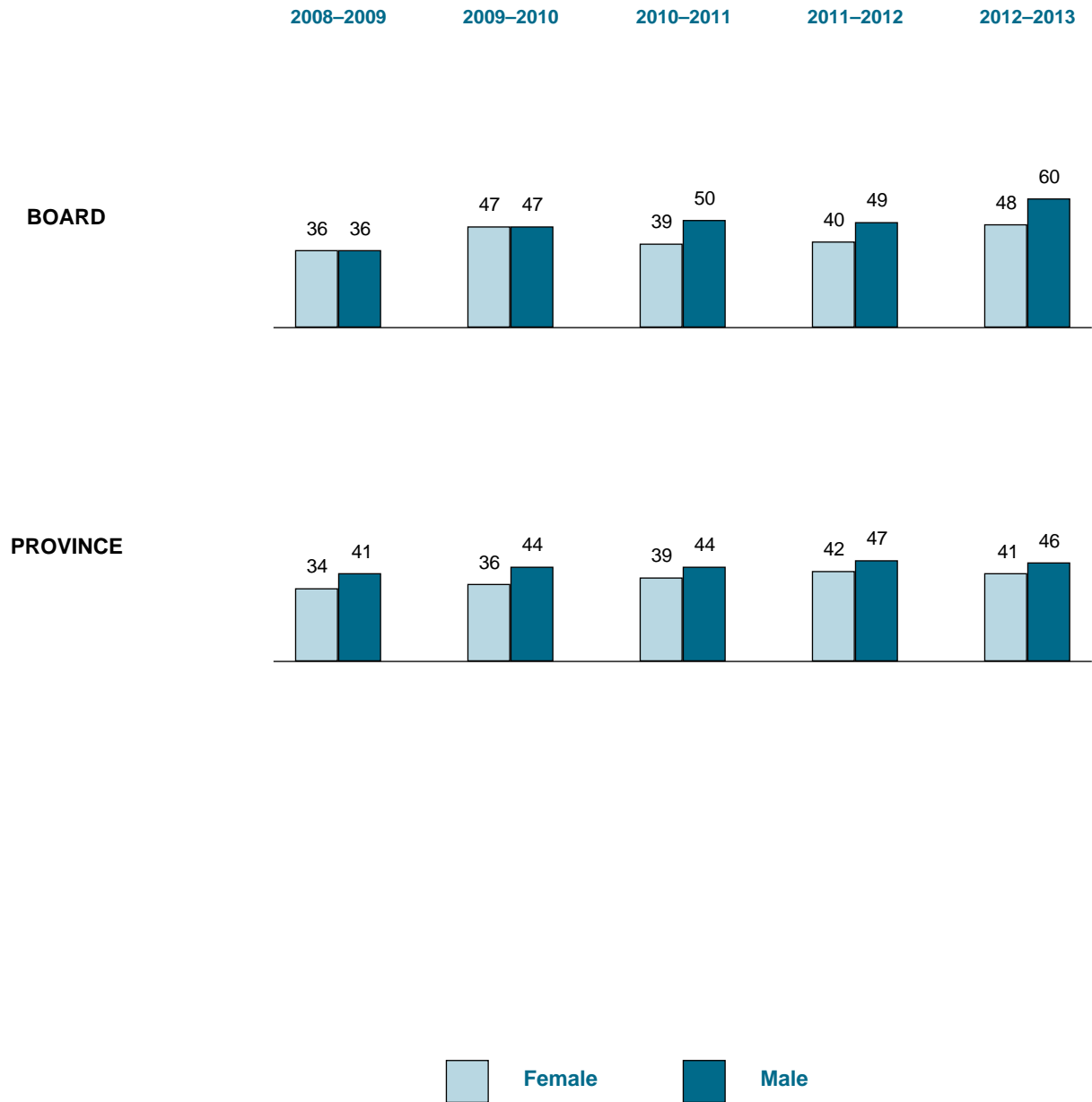


* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

† 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**



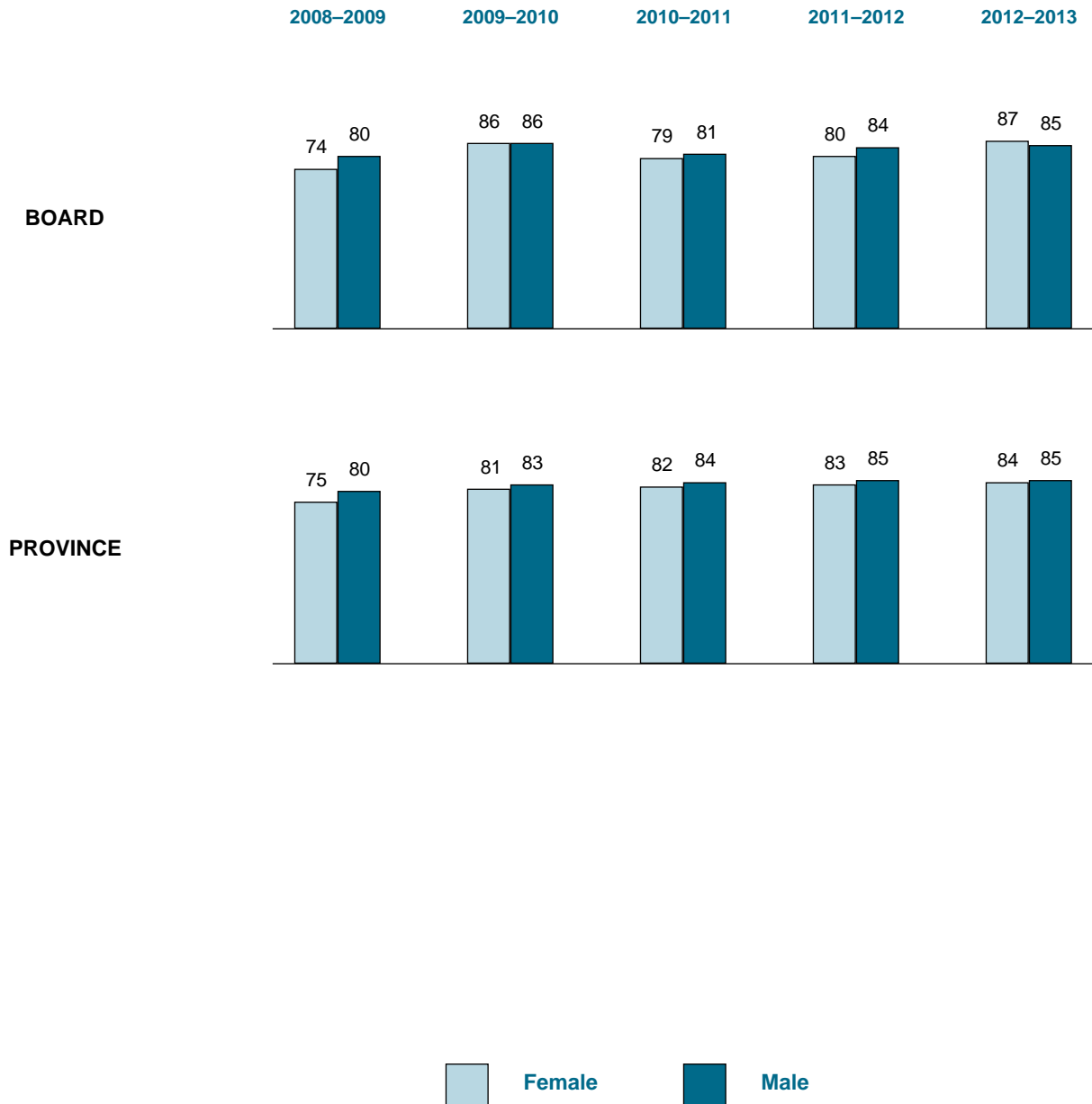
Total Number of Students in Applied Mathematics Course†

	2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	342	377	327	344	300	318	257	326	227	277
Province	21 752	26 730	21 262	26 304	19 721	24 374	18 563	23 236	17 695	22 181

† 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 †

	2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	658	632	662	616	637	612	596	554	609	572
Province	51 554	49 438	51 972	49 296	50 814	48 464	50 134	47 607	49 986	47 171

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =439)

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.		143
I am good at mathematics.		143
I am able to answer difficult mathematics questions.		99
Mathematics is one of my favourite subjects.		107
I understand most of the mathematics I am taught.		254
Mathematics is an easy subject.		100
I try to do my best in mathematics class.		342
The mathematics I learn now is useful for everyday life.		166
The mathematics I learn now helps me do work in other subjects.		214
I need to do well in mathematics to study what I want later.		224
I need to keep taking mathematics for the kind of job I want after I leave school.		196

Not at all confident
 Somewhat confident
 Confident
 Very confident

How confident are you that you can answer mathematics questions related to the following?	Percentage of Students*	Number of students who answered "very confident"
number sense (e.g., operations with integers, rational numbers, exponents)		56
algebra (e.g., solving equations, simplifying expressions with polynomials)		69
linear relations (e.g., scatter plots, lines of best fit)		101
measurement (e.g., perimeter, area, volume)		117
geometry (e.g., angles, parallel lines)		68

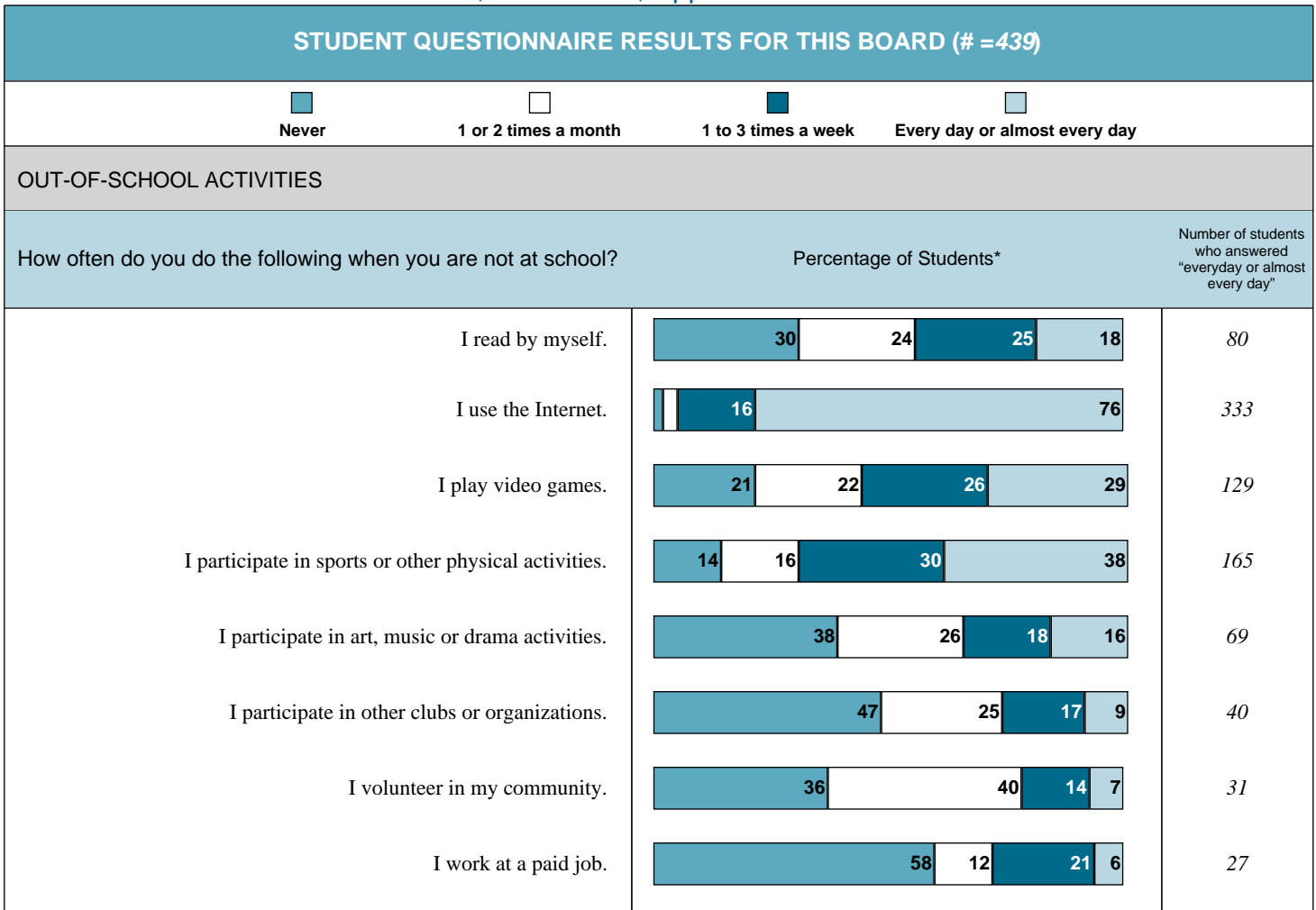
* Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =439)					
	 Never or almost never	 Sometimes	 Often	 Very Often	
DOING MATHEMATICS					
How often do you do the following when studying mathematics or working on a mathematics problem?	Percentage of Students*			Number of students who answered "very often"	
I connect new mathematics concepts to what I already know about mathematics or other subjects.	17	54	21	6	26
I check my mathematics answers to see if they make sense.	9	33	39	18	77
I apply new mathematics concepts to real-life problems.	32	41	17	8	35
I take time to discuss my mathematics assignments with my classmates.	28	41	21	8	34
I look for more than one way to solve mathematics problems.	14	38	32	15	68
How often do you complete your mathematics homework?	Percentage of Students*			Number of students	
I am not usually assigned any mathematics homework	6				28
Never or almost never	8				35
Sometimes		28			122
Often			31		135
Always				25	111

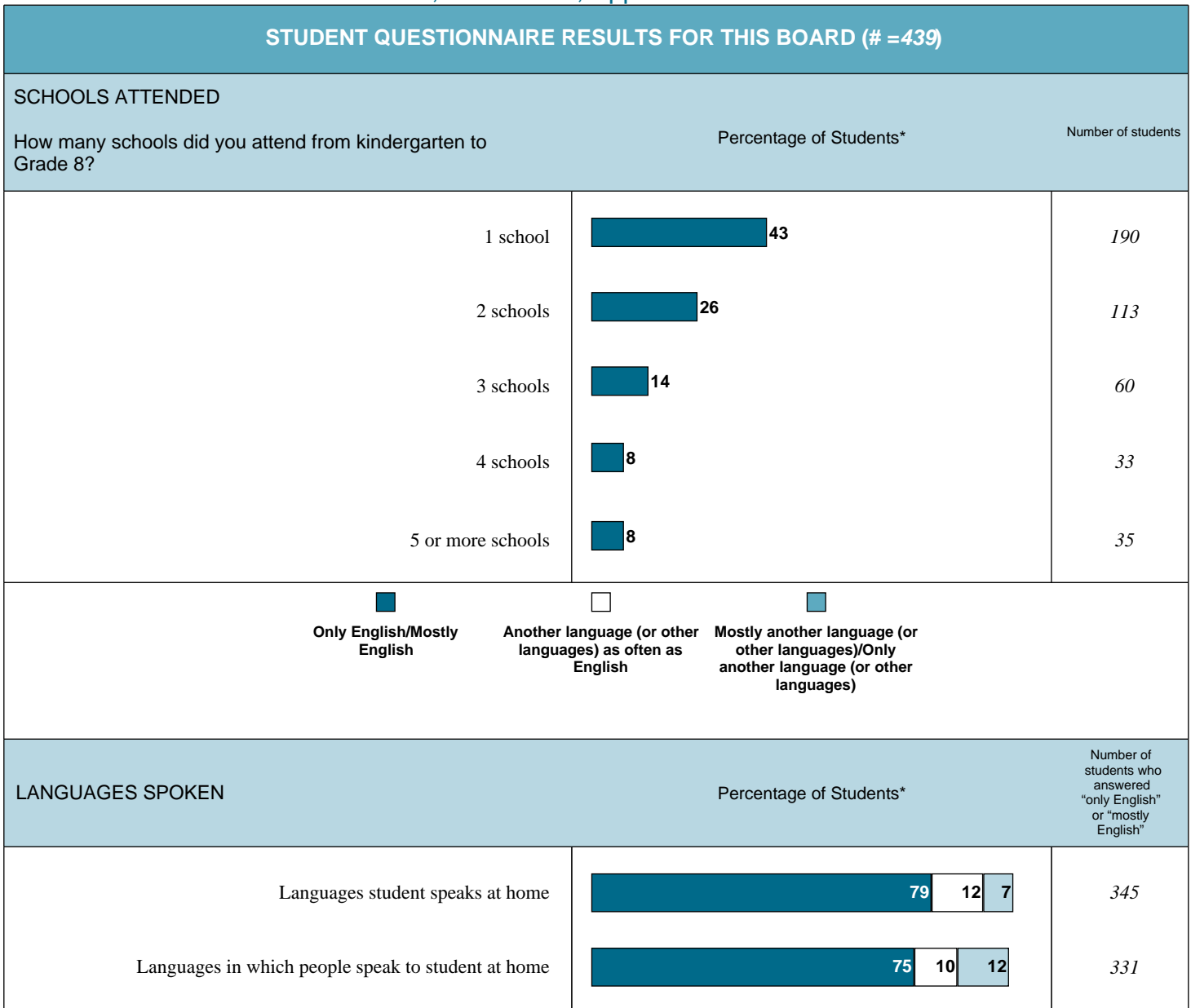
* Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course








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

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course



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

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =439)		
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	 50	218
No	 1	4
Don't know	 47	206
<i>Total number of students:</i>		218
Were you told how much the assessment will count as part of your class mark (e.g., 5%)? †	Percentage of Students*	Number of students
Yes	 87	190
No	 13	28
<i>Total number of students:</i>		218
Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more seriously? †	Percentage of Students*	Number of students
Yes	 71	155
No	 11	25
Undecided	 17	38

* Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

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

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 439)	Female* (# = 197)	Male* (# = 242)	All Students (# = 33 705)	Female* (# = 15 120)	Male* (# = 18 582)
STUDENTS' ATTITUDES TOWARD MATHEMATICS						
Percentage of students indicating they "agree" or "strongly agree" with the following statements: †						
I like mathematics.	33%	31%	34%	34%	27%	40%
I am good at mathematics.	33%	31%	33%	35%	27%	41%
I am able to answer difficult mathematics questions.	23%	15%	29%	23%	15%	29%
Mathematics is one of my favourite subjects.	24%	22%	26%	21%	17%	25%
I understand most of the mathematics I am taught.	58%	51%	63%	61%	57%	65%
Mathematics is an easy subject.	23%	19%	26%	20%	14%	24%
I try to do my best in mathematics class.	78%	85%	72%	80%	84%	76%
The mathematics I learn now is useful for everyday life.	38%	28%	45%	38%	33%	42%
The mathematics I learn now helps me do work in other subjects.	49%	47%	50%	45%	43%	47%
I need to do well in mathematics to study what I want later.	51%	46%	55%	51%	48%	53%
I need to keep taking mathematics for the kind of job I want after I leave school.	45%	35%	52%	45%	41%	48%
Percentage of students indicating they feel "confident" or "very confident" that they can answer mathematics questions related to the following: ‡						
number sense (e.g., operations with integers, rational numbers, exponents)	47%	39%	54%	46%	38%	53%
algebra (e.g., solving equations, simplifying expressions with polynomials)	48%	42%	53%	45%	41%	49%
linear relations (e.g., scatter plots, lines of best fit)	68%	66%	70%	60%	54%	64%
measurement (e.g., perimeter, area, volume)	65%	61%	68%	68%	64%	71%
geometry (e.g., angles, parallel lines)	49%	48%	50%	48%	41%	54%

* Only includes students for whom gender data were available.

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

‡ Other response options were "not at all confident" and "somewhat confident."

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 439)	Female* (# = 197)	Male* (# = 242)	All Students (# = 33 705)	Female* (# = 15 120)	Male* (# = 18 582)
DOING MATHEMATICS						
Percentage of students indicating they do the following “very often” when studying mathematics or working on a mathematics problem: †						
I connect new mathematics concepts to what I already know about mathematics or other subjects.	6%	6%	6%	6%	4%	6%
I check my mathematics answers to see if they make sense.	18%	21%	15%	18%	19%	17%
I apply new mathematics concepts to real-life problems.	8%	6%	10%	5%	3%	6%
I take time to discuss my mathematics assignments with my classmates.	8%	10%	6%	6%	6%	6%
I look for more than one way to solve mathematics problems.	15%	15%	16%	12%	10%	13%
Percentage of students indicating they complete their mathematics homework at the following frequencies: ‡						
I am not usually assigned any mathematics homework	6%	5%	7%	11%	11%	12%
Never or almost never	8%	5%	11%	8%	7%	10%
Sometimes	28%	23%	32%	28%	26%	29%
Often	31%	31%	30%	32%	33%	31%
Always	25%	35%	18%	18%	21%	15%

* Only includes students for whom gender data were available.

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

‡ Percentages may not add up to 100, due to rounding or to ambiguous responses or blanks.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 439)	Female* (# = 197)	Male* (# = 242)	All Students (# = 33 705)	Female* (# = 15 120)	Male* (# = 18 582)
OUT-OF-SCHOOL ACTIVITIES						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school: †						
I read by myself.	18%	23%	14%	19%	26%	14%
I use the Internet.	76%	78%	74%	74%	78%	70%
I play video games.	29%	9%	46%	29%	10%	43%
I participate in sports or other physical activities.	38%	29%	44%	35%	26%	43%
I participate in art, music or drama activities.	16%	21%	11%	18%	24%	13%
I participate in other clubs or organizations.	9%	10%	9%	8%	7%	9%
I volunteer in my community.	7%	6%	8%	5%	6%	5%
I work at a paid job.	6%	4%	8%	8%	6%	9%
SCHOOLS ATTENDED						
Percentage of students indicating the number of schools they attended from kindergarten to Grade 8: ‡						
1 school	43%	39%	47%	26%	25%	26%
2 schools	26%	25%	26%	30%	30%	29%
3 schools	14%	16%	12%	20%	20%	20%
4 schools	8%	9%	7%	11%	11%	11%
5 or more schools	8%	10%	7%	12%	12%	11%
LANGUAGES SPOKEN						
Percentage of students indicating that they speak the following languages at home: ‡						
Only English/Mostly English	79%	78%	79%	79%	79%	79%
Another language (or other languages) as often as English	12%	13%	11%	13%	14%	12%
Mostly another language (or other languages)/ Only another language (or other languages)	7%	7%	8%	6%	6%	7%
Percentage of students indicating the languages people speak to them at home: ‡						
Only English/Mostly English	75%	75%	76%	75%	75%	75%
Another language (or other languages) as often as English	10%	12%	9%	12%	12%	11%
Mostly another language (or other languages)/ Only another language (or other languages)	12%	11%	12%	10%	10%	10%

* Only includes students for whom gender data were available.

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

‡ Percentages may not add up to 100, due to rounding or to ambiguous responses or blanks.

Grade 9 Assessment of Mathematics, 2012–2013, Applied Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 439)	Female* (# = 197)	Male* (# = 242)	All Students (# = 33 705)	Female* (# = 15 120)	Male* (# = 18 582)
USE OF THE ASSESSMENT IN CLASS MARKS						
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	50%	51%	49%	44%	46%	42%
No	1%	1%	1%	2%	2%	3%
Don't know	47%	46%	48%	51%	49%	53%
Percentage of students indicating they were told how much the assessment will count as part of their class mark: ††						
	All Students (# = 218)	Female* (# = 100)	Male* (# = 118)	All Students (# = 14 800)	Female* (# = 6 991)	Male* (# = 7 807)
Yes	87%	85%	89%	88%	89%	88%
No	13%	15%	11%	11%	11%	12%
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously: ††						
	All Students (# = 218)	Female* (# = 100)	Male* (# = 118)	All Students (# = 14 800)	Female* (# = 6 991)	Male* (# = 7 807)
Yes	71%	76%	67%	76%	78%	75%
No	11%	10%	13%	9%	7%	12%
Undecided	17%	14%	20%	14%	15%	14%

* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

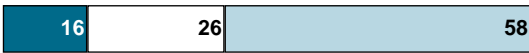

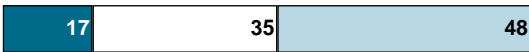
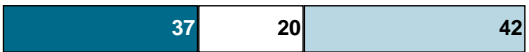







†† Numbers and percentages are based on the number of students who indicated that their teacher will count some or all parts of the assessment as part of their class mark.

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 086)







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.		625
I am good at mathematics.		605
I am able to answer difficult mathematics questions.		516
Mathematics is one of my favourite subjects.		458
I understand most of the mathematics I am taught.		808
Mathematics is an easy subject.		354
I try to do my best in mathematics class.		944
The mathematics I learn now is useful for everyday life.		395
The mathematics I learn now helps me do work in other subjects.		586
I need to do well in mathematics to study what I want later.		718
I need to keep taking mathematics for the kind of job I want after I leave school.		667





Not at all confident
 Somewhat confident
 Confident
 Very confident

How confident are you that you can answer mathematics questions related to the following?

How confident are you that you can answer mathematics questions related to the following?	Percentage of Students*	Number of students who answered "very confident"
number sense (e.g., operations with integers, rational numbers, exponents)		308
algebra (e.g., solving equations, simplifying expressions with polynomials)		366
linear relations (e.g., scatter plots, lines of best fit)		237
analytic geometry (e.g., slope, y-intercept, equations of lines)		273
measurement (e.g., perimeter, area, volume)		477
geometry (e.g., angles, parallel lines)		394

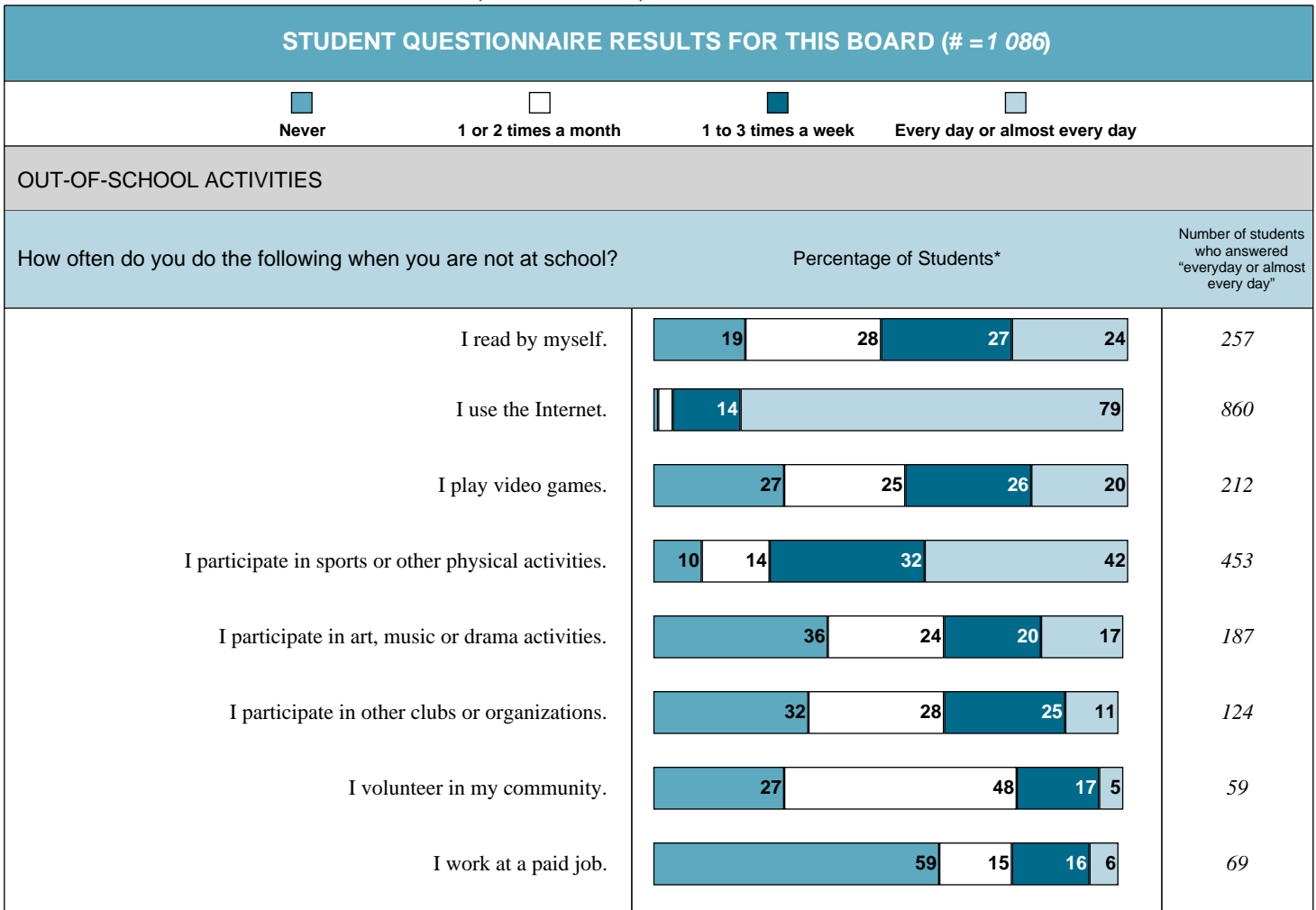
* Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 086)				
	 Never or almost never	 Sometimes	 Often	 Very Often
DOING MATHEMATICS				
How often do you do the following when studying mathematics or working on a mathematics problem?		Percentage of Students*		Number of students who answered "very often"
I connect new mathematics concepts to what I already know about mathematics or other subjects.				163
I check my mathematics answers to see if they make sense.				384
I apply new mathematics concepts to real-life problems.				88
I take time to discuss my mathematics assignments with my classmates.				141
I look for more than one way to solve mathematics problems.				164
How often do you complete your mathematics homework?		Percentage of Students*		Number of students
I am not usually assigned any mathematics homework				5
Never or almost never				43
Sometimes				185
Often				363
Always				466











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

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course



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

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 086)			
SCHOOLS ATTENDED			
How many schools did you attend from kindergarten to Grade 8?	Percentage of Students*	Number of students	
1 school	 56	613	
2 schools	 25	276	
3 schools	 7	78	
4 schools	 5	49	
5 or more schools	 3	38	
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Only English/Mostly English </div> <div style="text-align: center;">  Another language (or other languages) as often as English </div> <div style="text-align: center;">  Mostly another language (or other languages)/Only another language (or other languages) </div> </div>			
LANGUAGES SPOKEN			Number of students who answered "only English" or "mostly English"
	Percentage of Students*		
Languages student speaks at home	 79 12 7	855	
Languages in which people speak to student at home	 74 11 12	801	

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

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 086)		
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	75	814
No	1	9
Don't know	21	230
<i>Total number of students:</i>		814
Were you told how much the assessment will count as part of your class mark (e.g., 5%)? †	Percentage of Students*	Number of students
Yes	96	784
No	4	29
<i>Total number of students:</i>		814
Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more seriously? †	Percentage of Students*	Number of students
Yes	85	692
No	7	57
Undecided	8	63

* Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

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

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 1 086)	Female* (# = 568)	Male* (# = 518)	All Students (# = 88 883)	Female* (# = 46 008)	Male* (# = 42 874)
STUDENTS' ATTITUDES TOWARD MATHEMATICS						
Percentage of students indicating they "agree" or "strongly agree" with the following statements: †						
I like mathematics.	58%	52%	63%	56%	50%	62%
I am good at mathematics.	56%	51%	61%	56%	49%	63%
I am able to answer difficult mathematics questions.	48%	40%	56%	47%	38%	56%
Mathematics is one of my favourite subjects.	42%	38%	47%	39%	34%	45%
I understand most of the mathematics I am taught.	74%	73%	76%	75%	72%	78%
Mathematics is an easy subject.	33%	29%	37%	31%	25%	37%
I try to do my best in mathematics class.	87%	93%	81%	85%	89%	81%
The mathematics I learn now is useful for everyday life.	36%	30%	43%	36%	32%	42%
The mathematics I learn now helps me do work in other subjects.	54%	51%	57%	56%	54%	58%
I need to do well in mathematics to study what I want later.	66%	63%	69%	64%	61%	68%
I need to keep taking mathematics for the kind of job I want after I leave school.	61%	57%	66%	59%	55%	63%
Percentage of students indicating they feel "confident" or "very confident" that they can answer mathematics questions related to the following: ‡						
number sense (e.g., operations with integers, rational numbers, exponents)	73%	68%	80%	71%	64%	78%
algebra (e.g., solving equations, simplifying expressions with polynomials)	73%	72%	73%	71%	69%	74%
linear relations (e.g., scatter plots, lines of best fit)	62%	57%	67%	60%	53%	67%
analytic geometry (e.g., slope, y-intercept, equations of lines)	58%	54%	63%	61%	57%	66%
measurement (e.g., perimeter, area, volume)	82%	79%	86%	81%	77%	85%
geometry (e.g., angles, parallel lines)	72%	66%	79%	71%	66%	76%

* Only includes students for whom gender data were available.

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

‡ Other response options were "not at all confident" and "somewhat confident."

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 1 086)	Female* (# = 568)	Male* (# = 518)	All Students (# = 88 883)	Female* (# = 46 008)	Male* (# = 42 874)
DOING MATHEMATICS						
Percentage of students indicating they do the following “very often” when studying mathematics or working on a mathematics problem: †						
I connect new mathematics concepts to what I already know about mathematics or other subjects.	15%	12%	19%	13%	12%	14%
I check my mathematics answers to see if they make sense.	35%	38%	33%	31%	33%	28%
I apply new mathematics concepts to real-life problems.	8%	5%	11%	6%	4%	8%
I take time to discuss my mathematics assignments with my classmates.	13%	14%	12%	11%	11%	10%
I look for more than one way to solve mathematics problems.	15%	13%	18%	14%	12%	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	4%	2%	6%	6%	4%	8%
Sometimes	17%	13%	21%	21%	18%	25%
Often	33%	32%	36%	38%	38%	38%
Always	43%	50%	35%	31%	37%	25%

* Only includes students for whom gender data were available.

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

‡ Percentages may not add up to 100, due to rounding or to ambiguous responses or blanks.

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 1 086)	Female* (# = 568)	Male* (# = 518)	All Students (# = 88 883)	Female* (# = 46 008)	Male* (# = 42 874)
OUT-OF-SCHOOL ACTIVITIES						
Percentage of students indicating they do the following “every day or almost every day” when they are not at school: †						
I read by myself.	24%	29%	18%	26%	33%	19%
I use the Internet.	79%	82%	76%	80%	82%	78%
I play video games.	20%	4%	36%	22%	6%	39%
I participate in sports or other physical activities.	42%	32%	53%	40%	33%	47%
I participate in art, music or drama activities.	17%	19%	15%	20%	24%	14%
I participate in other clubs or organizations.	11%	9%	14%	11%	10%	11%
I volunteer in my community.	5%	4%	7%	4%	5%	4%
I work at a paid job.	6%	4%	8%	4%	4%	5%
SCHOOLS ATTENDED						
Percentage of students indicating the number of schools they attended from kindergarten to Grade 8: ‡						
1 school	56%	57%	56%	27%	27%	27%
2 schools	25%	25%	26%	32%	32%	32%
3 schools	7%	7%	7%	19%	19%	20%
4 schools	5%	5%	4%	10%	10%	10%
5 or more schools	3%	3%	4%	8%	8%	8%
LANGUAGES SPOKEN						
Percentage of students indicating that they speak the following languages at home: ‡						
Only English/Mostly English	79%	80%	78%	72%	73%	71%
Another language (or other languages) as often as English	12%	11%	12%	16%	16%	16%
Mostly another language (or other languages)/ Only another language (or other languages)	7%	6%	8%	9%	8%	10%
Percentage of students indicating the languages people speak to them at home: ‡						
Only English/Mostly English	74%	75%	72%	66%	67%	65%
Another language (or other languages) as often as English	11%	10%	11%	15%	15%	14%
Mostly another language (or other languages)/ Only another language (or other languages)	12%	11%	12%	15%	14%	17%

* Only includes students for whom gender data were available.

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

‡ Percentages may not add up to 100, due to rounding or to ambiguous responses or blanks.

Grade 9 Assessment of Mathematics, 2012–2013, Academic Course

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 1 086)	Female* (# = 568)	Male* (# = 518)	All Students (# = 88 883)	Female* (# = 46 008)	Male* (# = 42 874)
USE OF THE ASSESSMENT IN CLASS MARKS						
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	75%	77%	73%	69%	71%	66%
No	1%	1%	1%	2%	1%	2%
Don't know	21%	19%	23%	26%	23%	28%
Percentage of students indicating they were told how much the assessment will count as part of their class mark: ††						
	All Students (# = 814)	Female* (# = 438)	Male* (# = 376)	All Students (# = 61 078)	Female* (# = 32 680)	Male* (# = 28 397)
Yes	96%	97%	95%	94%	94%	93%
No	4%	3%	5%	6%	6%	6%
Percentage of students indicating that counting the Grade 9 Assessment of Mathematics as part of their class mark motivates them to take the assessment more seriously: ††						
	All Students (# = 814)	Female* (# = 438)	Male* (# = 376)	All Students (# = 61 078)	Female* (# = 32 680)	Male* (# = 28 397)
Yes	85%	87%	83%	78%	80%	75%
No	7%	4%	10%	10%	7%	13%
Undecided	8%	8%	7%	12%	13%	11%

* Includes only students for whom gender data were available.

† Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

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

Grade 9 Assessment of Mathematics, 2012–2013

EXPLANATION OF TERMS

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