

# School Board Report



Grade 9 Assessment of Mathematics, 2013–2014

#### **Board: Algonquin and Lakeshore Catholic DSB (67202)**

On behalf of EQAO, I am pleased to provide you with the results of the 2013–2014 Grade 9 Assessment of Mathematics.

This report includes the 2014 results as well as results for previous years, so you can track progress over time. You'll also find demographic and attitudinal information, which provides context for interpreting 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 results alongside board and classroom assessment data have proven effective for monitoring progress and allowing school communities to make evidence-based decisions in their planning.

At EQAO, we strongly believe that reliable evidence empowers and guides the judgment and actions of professional educators and school communities. We are pleased to continue our partnership with you as we all work toward helping students reach their full potential. I hope you will find this report to be a rich source of information as you turn knowledge into action for the benefit of your students and community.

Sincerely,

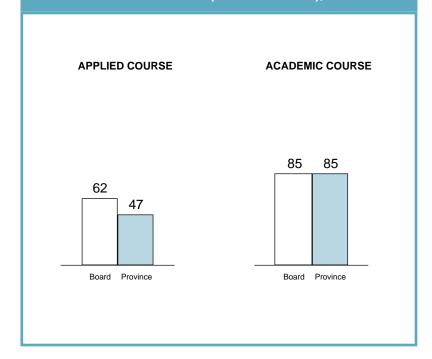
Bruce Rodrigues Chief Executive Officer

Education Quality and Accountability Office

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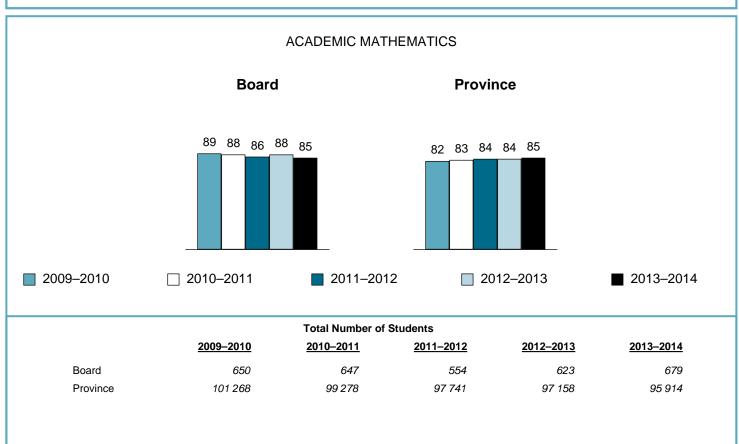
PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4), 2013–2014



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#### Grade 9 Assessment of Mathematics, 2013–2014

#### PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME APPLIED MATHEMATICS **Board Province** 59 59 <sub>54</sub> 56 <u>62</u> 40 42 44 44 47 2010–2011 2011-2012 2009-2010 2012-2013 2013-2014 **Total Number of Students** 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 Board 316 253 264 228 200 Province 47 566 44 095 41 799 39 881 38 181



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#### **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.

#### OB

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.

#### OB

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.

#### OB

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.

#### OB

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.

#### OB

EQAO values students' privacy. Beginning in 2012-2013, results are not reported publicly for schools where fewer than 10 students participated because it might be possible to identify individual students. Prior to 2012-2013, results were not reported publicly for schools where fewer than 15 students participated.

#### 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.

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## **Contextual Information**

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

	Воа	ard	Prov	ince
Enrolment				
Number of students in applied mathematics course		200		38 181
Number of classes with students in applied mathematics course		14		2 496
Number of schools with applied mathematics classes		5		705
	Number	Percent	Number	Percent
Participation in the Assessment				
Students who participated in the assessment	198	99%	36 758	96%
Participating students who received one or more accommodations*	82	41%	11 573	31%
Participating students who received one or more special provisions*	0	0%	1 841	5%
Students who did not complete any part of the assessment (no data)*	2	1%	1 423	4%
<b>Gender</b> <sup>†</sup> Based on number of students enrolled				
Female	91	46%	16 662	44%
Male	109	54%	21 519	56%
Gender not specified	0	0%	0	0%
Student Status <sup>†</sup> Based on number of students enrolled				
English language learners*	0	0%	3 115	8%
Students with special education needs (excluding gifted)*	96	48%	14 241	37%
Semester/Full Year Based on number of students enrolled				
First-semester course	51	26%	17 324	45%
Second-semester course	149	74%	17 852	47%
Full-year course	0	0%	3 005	8%
Language and School Background††	<u>'</u>			
Based on Student Questionnaire data  Number of Respondents:	18	7	31 9	79
Speak only or mostly a language other than English at home	7	4%	2 043	6%
Speak another language as often as English at home	12	6%	4 009	13%
Attended three or more elementary schools from kindergarten to Grade 8	37	20%	13 010	41%

See the Explanation of Terms.

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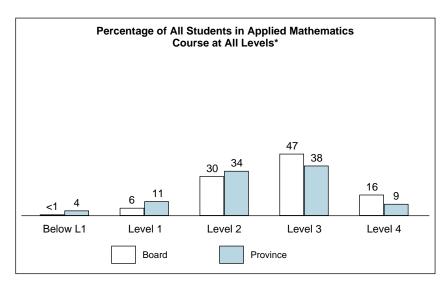
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Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be

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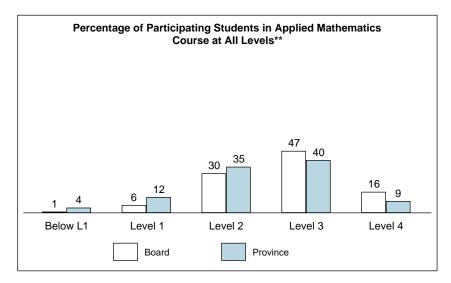
### **Results for All Students**

All Students*			
Number of Students	Bo:	ard 00	Province 38 181
	#	%	%
Level 4	31	16%	9%
Level 3	94	47%	38%
Level 2	60	30%	34%
Level 1	12	6%	11%
Below Level 1	1	<1%	4%
Participating Students	198	99%	96%
No Data	2	1%	4%
At or Above Provincial Standard (Levels 3 and 4)†	l	62%	47%



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

Participating Students**					
Number of Students	Bo:	ard 98	Province 36 758		
	#	%	%		
Level 4	31	16%	9%		
Level 3	94	47%	40%		
Level 2	60	30%	35%		
Level 1	12	6%	12%		
Below Level 1	1	1%	4%		
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>			49%		



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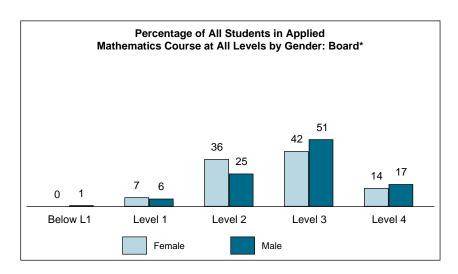
Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

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

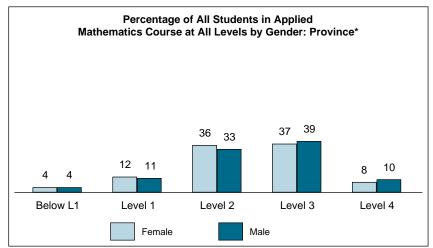
These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

# Results by Gender<sup>††</sup>

All Students: Board by Gender*					
Number of Students	Fen	nale 11		ale 09	
	#	%	#	%	
Level 4	13	14%	18	17%	
Level 3	38	42%	56	51%	
Level 2	33	36%	27	25%	
Level 1	6	7%	6	6%	
Below Level 1	0	0%	1	1%	
Participating Students	90	99%	108	99%	
No Data	1	1%	1	1%	
At or Above Provincial Standard (Levels 3 and 4) †		56%		68%	



All Students: Province by Gender*					
Number of Students	Female 16 662			ale 519	
	#	%	#	%	
Level 4	1 325	8%	2 078	10%	
Level 3	6 145	37%	8 463	39%	
Level 2	5 962	36%	7 002	33%	
Level 1	1 948	12%	2 292	11%	
Below Level 1	652	4%	891	4%	
Participating Students	16 032	96%	20 726	96%	
No Data	630	4%	793	4%	
At or Above Provincial Standard (Levels 3 and 4) †		45%		49%	



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<sup>\*</sup> 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.

<sup>†</sup> Includes only students for whom gender data were available.

## **Contextual Information**

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

	Воа	ard	Prov	ince
Enrolment				
Number of students in academic mathematics course		679		95 914
Number of classes with students in academic mathematics course		31		4 073
Number of schools with academic mathematics classes		5		688
	Number	Percent	Number	Percent
Participation in the Assessment				
Students who participated in the assessment	676	100%	95 178	99%
Participating students who received one or more accommodations*	50	7%	5 146	5%
Participating students who received one or more special provisions*	1	<1%	<i>3 468</i>	4%
Students who did not complete any part of the assessment (no data)*	3	<1%	736	1%
Gender <sup>†</sup> Based on number of students enrolled				
Female	328	48%	49 157	51%
Male	351	52%	46 757	49%
Gender not specified	0	0%	0	0%
Student Status <sup>†</sup> Based on number of students enrolled				
English language learners*	1	<1%	6 137	6%
Students with special education needs (excluding gifted)*	61	9%	5 969	6%
Semester/Full Year Based on number of students enrolled				
First-semester course	407	60%	42 784	45%
Second-semester course	272	40%	42 510	44%
Full-year course	0	0%	10 620	11%
Language and School Background <sup>††</sup> Based on Student Questionnaire data			0.7	20
Number of Respondents:	63 15		87 ( 7 440	)38 9%
Speak only or mostly a language other than English at home		2%		
Speak another language as often as English at home	39	6%	13 677	16%
Attended three or more elementary schools from kindergarten to Grade 8  See the Explanation of Terms.	165	26%	31 324	36%

<sup>\*</sup> See the Explanation of Terms.

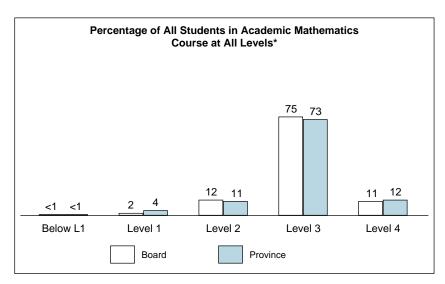
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<sup>†</sup> Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

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.

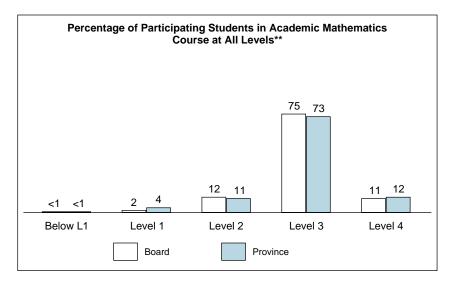
#### **Results for All Students**

All Students*					
Number of Students	Bo:	ard 79	Province 95 914		
	#	%	%		
Level 4	72	11%	12%		
Level 3	507	75%	73%		
Level 2	84	12%	11%		
Level 1	12	2%	4%		
Below Level 1	1	<1%	<1%		
Participating Students	676	100%	99%		
No Data	3	<1%	1%		
At or Above Provincial Standard (Levels 3 and 4)†	l	85%	85%		



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

Participating Students**					
Number of Students	Bo:	ard 76	Province 95 178		
	#	%	%		
Level 4	72	11%	12%		
Level 3	507	75%	73%		
Level 2	84	12%	11%		
Level 1	12	2%	4%		
Below Level 1	1	<1%	<1%		
At or Above Provincial Standard (Levels 3 and 4) †		86%	85%		



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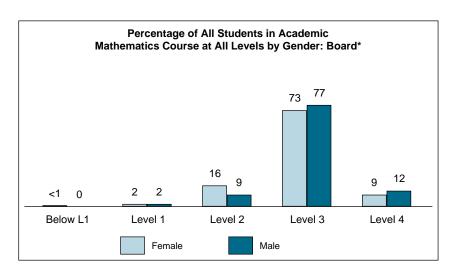
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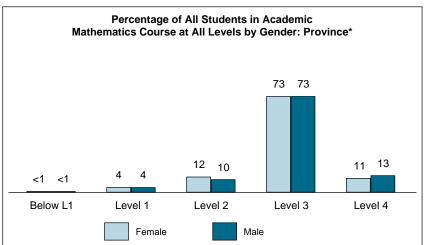
<sup>†</sup> These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

# Results by Gender<sup>††</sup>

All Students: Board by Gender*					
Number of Students		nale 28		ale 5 <i>1</i>	
	#	%	#	%	
Level 4	29	9%	43	12%	
Level 3	238	73%	269	77%	
Level 2	52	16%	32	9%	
Level 1	6	2%	6	2%	
Below Level 1	1	<1%	o	0%	
Participating Students	326	99%	350	100%	
No Data	2	1%	1	<1%	
At or Above Provincial Standard (Levels 3 and 4)†	l	81%		89%	



All Students: Province by Gender*					
Number of Students		nale 157		ale 757	
	#	%	#	%	
Level 4	5 363	11%	6 085	13%	
Level 3	35 706	73%	34 029	73%	
Level 2	5 688	12%	4 443	10%	
Level 1	1 918	4%	1 699	4%	
Below Level 1	87	<1%	160	<1%	
Participating Students	48 762	99%	46 416	99%	
No Data	395	1%	341	1%	
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>				86%	



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

<sup>†</sup> 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.

<sup>†</sup> Includes only students for whom gender data were available.

## Grade 9 Assessment of Mathematics, 2013–2014

# **Contextual Information over Time: Applied Mathematics Course**This information provides a context for interpreting the board's results of the current and previous administrations.

This information provides a context for interpreting the board's results of the current and previous administrations.					
	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Enrolment					
Number of students in applied mathematics course	316	253	264	228	200
Number of classes with students in applied mathematics course	23	18	22	15	14
Number of schools with applied mathematics classes	5	5	5	5	5
Participation in the Assessment					
Students who participated in the assessment	100%	98%	98%	100%	99%
Participating students who received one or more accommodations*	32%	43%	38%	36%	41%
Participating students who received one or more special provisions*	1%	0%	0%	<1%	0%
Students who did not complete any part of the assessment (no data)*	<1%	2%	2%	<1%	1%
Gender <sup>†</sup> Based on number of students enrolled					
Female	51%	47%	49%	45%	46%
Male	49%	53%	51%	55%	54%
Gender not specified	0%	0%	0%	0%	0%
Student Status <sup>†</sup> Based on number of students enrolled					
English language learners*	1%	0%	0%	<1%	0%
Students with special education needs (excluding gifted)*	38%	44%	42%	44%	48%
Semester/Full Year Based on number of students enrolled					
First-semester course	49%	47%	54%	41%	26%
Second-semester course	51%	53%	46%	59%	74%
Full-year course	0%	0%	0%	0%	0%
Language and School Background	1				
Based on Student Questionnaire data  Number of Respondents	s: 310	241	248	202	187
Speak only or mostly a language other than English at home	2%	3%	4%	2%	4%
Speak another language as often as English at home	3%	10%	6%	6%	6%
Attended three or more elementary schools from kindergarten to Grade 8	39%	37%	34%	30%	20%
See the Explanation of Torms					

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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.

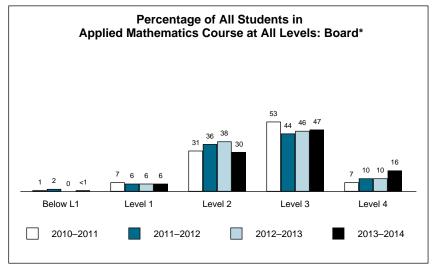
Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing

because they were not provided by the students.

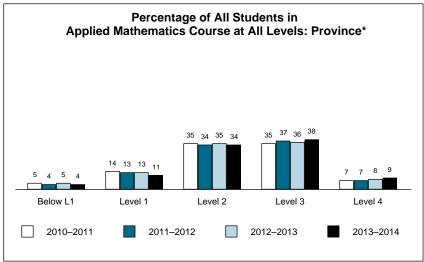
#### Results over Time, 2010-2011 to 2013-2014

# **Applied Mathematics Course for All Students**

Board*				
Year	'10–'11	'11–'12	'12–'13	'13–'14
Number of Students	253	264	228	200
Level 4	7%	10%	10%	16%
Level 3	53%	44%	46%	47%
Level 2	31%	36%	38%	30%
Level 1	7%	6%	6%	6%
Below Level 1	1%	2%	0%	<1%
Participating Students	98%	98%	100%	99%
No Data	2%	2%	<1%	1%
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>	59%	54%	56%	62%



Province*				
Year	'10–'11	'11–'12	'12–'13	'13–'14
Number of Students	44 095	41 799	39 881	38 181
Level 4	7%	7%	8%	9%
Level 3	35%	37%	36%	38%
Level 2	35%	34%	35%	34%
Level 1	14%	13%	13%	11%
Below Level 1	5%	4%	5%	4%
Participating Students	95%	95%	96%	96%
No Data	5%	5%	4%	4%
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>	42%	44%	44%	47%



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## Grade 9 Assessment of Mathematics, 2013-2014

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

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

	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Enrolment					
Number of students in academic mathematics course	650	647	554	623	679
Number of classes with students in academic mathematics course	32	33	26	31	31
Number of schools with academic mathematics classes	5	5	5	5	5
Participation in the Assessment					
Students who participated in the assessment	100%	100%	99%	100%	100%
Participating students who received one or more accommodations*	5%	5%	8%	6%	7%
Participating students who received one or more special provisions*	1%	0%	<1%	<1%	<1%
Students who did not complete any part of the assessment (no data)*	<1%	<1%	1%	<1%	<1%
Gender <sup>†</sup> Based on number of students enrolled					
Female	55%	52%	56%	51%	48%
Male	45%	48%	44%	49%	52%
Gender not specified	0%	0%	0%	0%	0%
Student Status <sup>†</sup> Based on number of students enrolled					
English language learners*	1%	0%	<1%	<1%	<1%
Students with special education needs (excluding gifted)*	7%	6%	10%	8%	9%
Semester/Full Year Based on number of students enrolled					
First-semester course	49%	50%	52%	51%	60%
Second-semester course	51%	50%	48%	49%	40%
Full-year course	0%	0%	0%	0%	0%
Language and School Background††	_				
Based on Student Questionnaire data  Number of Respondents	: 616	629	505	570	632
Speak only or mostly a language other than English at home	3%	3%	4%	4%	2%
Speak another language as often as English at home	6%	6%	5%	6%	6%
Attended three or more elementary schools from kindergarten to Grade 8	22%	23%	23%	26%	26%

See the Explanation of Terms.

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Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing

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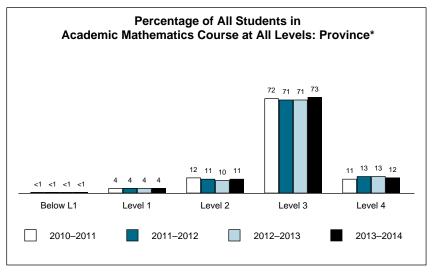
## Results over Time, 2010-2011 to 2013-2014

## **Academic Mathematics Course for All Students**

Board*				
Year	'10–'11	'11–'12	'12–'13	'13–'14
Number of Students	647	554	623	679
Level 4	5%	11%	11%	11%
Level 3	83%	75%	78%	75%
Level 2	11%	10%	9%	12%
Level 1	1%	3%	2%	2%
Below Level 1	0%	<1%	<1%	<1%
Participating Students	100%	99%	100%	100%
No Data	<1%	1%	<1%	<1%
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>	88%	86%	88%	85%

Acade		tage of All St atics Course	udents in at All Levels:	Board*
0 <1 <1 <1 Below L1	1 3 2 2 Level 1	11 10 g 12 Level 2	83 75 78 75 Level 3	11 11 11 5 Level 4
2010–2011	2011–	-2012	2012–2013	2013–2014

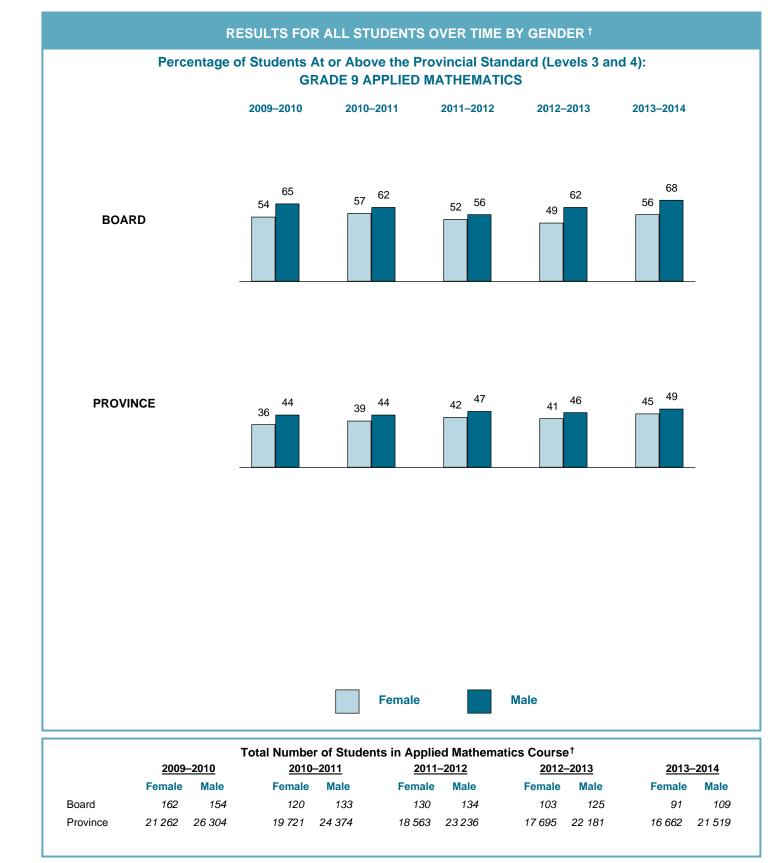
Province*				
Year	'10–'11	'11–'12	'12–'13	'13–'14
Number of Students	99 278	97 741	97 158	95 914
Level 4	11%	13%	13%	12%
Level 3	72%	71%	71%	73%
Level 2	12%	11%	10%	11%
Level 1	4%	4%	4%	4%
Below Level 1	<1%	<1%	<1%	<1%
Participating Students	99%	99%	99%	99%
No Data	1%	1%	1%	1%
At or Above Provincial Standard (Levels 3 and 4) <sup>†</sup>	83%	84%	84%	85%



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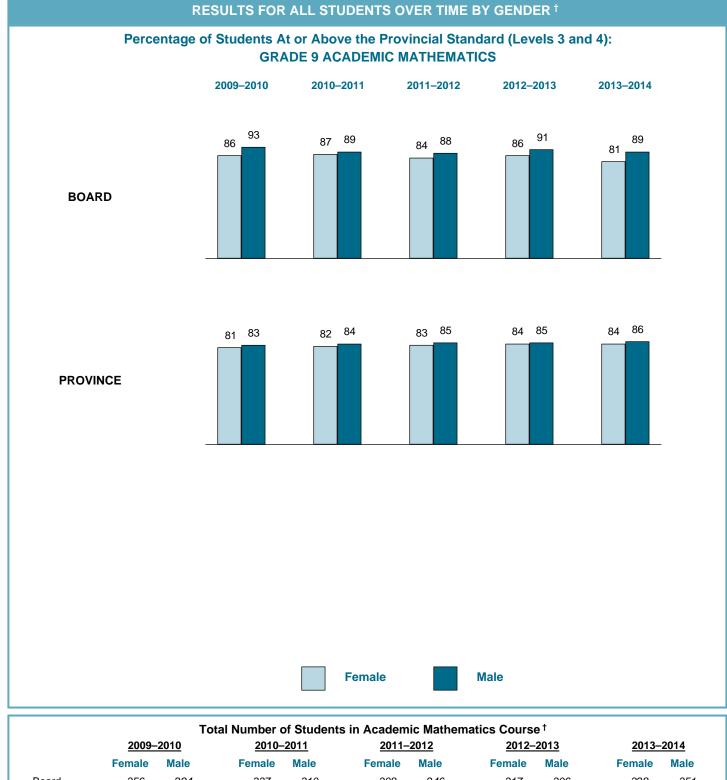
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<sup>&</sup>lt;sup>†</sup> Includes only students for whom gender data were available.

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			То	tal Number	of Student	s in Acaden	nic Mathem	natics Cours	e†		
l		2009-	<u>-2010</u>	<u>2010</u> -	<u>-2011</u>	<u>2011</u> -	<u>-2012</u>	<u>2012</u> -	<u>-2013</u>	<u>2013-</u>	<u>-2014</u>
l		Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
l	Board	356	294	337	310	308	246	317	306	328	351
	Province	51 972	49 296	50 814	48 464	50 134	47 607	49 986	47 171	49 157	46 757

Includes only students for whom gender data were available.

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Grade 9 Assessment of Mathematics, 2013–2014	+, Applied Course	
STUDENT QUESTIONNAIRE F	RESULTS FOR THIS BOARD (# =187)	
Strongly Disagree/Disagree Neither a	gree 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.	25 40 35	65
I am good at mathematics.	24 35 41	76
I am able to answer difficult mathematics questions.	33 40 25	47
Mathematics is one of my favourite subjects.	60 18 20	37
I understand most of the mathematics I am taught.	12 23 63	118
Mathematics is an easy subject.	42 37 20	37
I do my best in mathematics class.	14 19 66	123
The mathematics I learn now is useful for everyday life.	29 33 36	67
The mathematics I learn now helps me do work in other subjects.	22 29 46	86
I need to do well in mathematics to study what I want later.	12 32 54	101
I need to keep taking mathematics for the kind of job I want after I leave school.	16 33 49	92
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)	5 43 40 10	18
algebra (e.g., solving equations, simplifying expressions with polynomials)	13 32 36 17	32
linear relations (e.g., scatter plots, lines of best fit)	21 51 24	44
measurement (e.g., perimeter, area, volume)	22 38 35	66
geometry (e.g., angles, parallel lines)	10 36 28 24	44

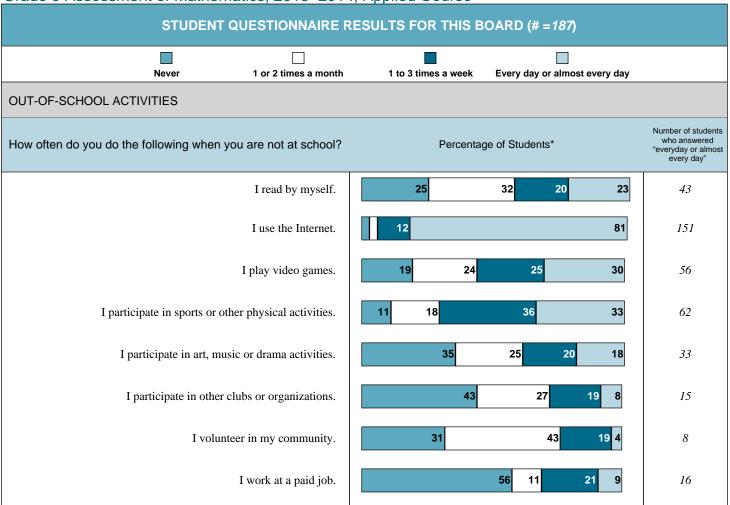
<sup>\*</sup> Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

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STUDENT QUE		ESULTS FOR THIS B	30ARD (# =187)	
Never or almost never	Sometimes	Often	Very Often	
DOING MATHEMATICS				
How often do you do the following when studyi or working on a mathematics problem?	ng mathematics	Percenta	ge of Students*	Number of students who answered "very often"
I connect new mathematics concepts to what I alm mathematics	eady know about or other subjects.	9	59 23 7	13
I check my mathematics answers to see if	they make sense.	6 27	45 21	39
I apply new mathematics concepts to re	eal-life problems.	30	47 18 4	7
I take time to discuss my mathematics assig	gnments with my classmates.	38	47 10 4	7
I look for more than one way to solve mathe	matics problems.	13	42 30 12	22
How often do you complete your mathematics	homework?	Percenta	ge of Students*	Number of students
I am not usually assigned any mather	natics homework	4		8
Neve	r or almost never	10		18
	Sometimes	30		56
	Often	32		60
	Always	23		43

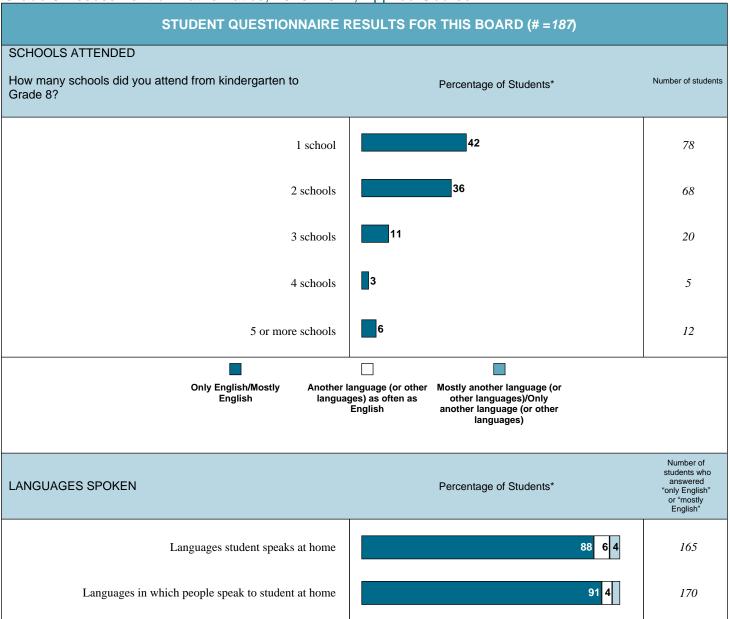
Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

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<sup>\*</sup> 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.

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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.

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# STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 187) USE OF THE ASSESSMENT IN CLASS MARKS Will your teacher count some or all parts of the Grade 9 Percentage of Students\* Assessment of Mathematics as part of your class mark? Number of students 110 Yes 2 No Don't know 72 Total number of students: 110 Were you told how much the assessment will count as part of your class mark (e.g., 5%)? † Percentage of Students\* Number of students 95 Yes 104 No 6 Total number of students: 110 Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more Percentage of Students\* Number of students seriously? † Yes 87 No 6 Undecided 17

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<sup>\*</sup> Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

<sup>†</sup> 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.

		Board		ŀ	Province		
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	All Students (# = 187)	Female* (# = 88)	Male* (# = 99)	All Students (# = 31 979)	Female* (# = 14 068)	Male* (# = 17 911)	
STUDENTS' ATTITUDES TOWARD MATHEMATICS							
Percentage of students indicating they "agree" or "str	ongly agr	ee" with t	he follow	ing stater	ments: †		
I like mathematics.	35%	24%	44%	36%	30%	41%	
I am good at mathematics.	41%	28%	52%	37%	29%	43%	
I am able to answer difficult mathematics questions.	25%	17%	32%	24%	16%	31%	
Mathematics is one of my favourite subjects.	20%	20%	19%	22%	18%	25%	
I understand most of the mathematics I am taught.	63%	58%	68%	62%	59%	65%	
Mathematics is an easy subject.	20%	12%	26%	20%	15%	24%	
I do my best in mathematics class.	66%	73%	60%	65%	68%	63%	
The mathematics I learn now is useful for everyday life.	36%	27%	43%	36%	31%	40%	
The mathematics I learn now helps me do work in other subjects.	46%	41%	51%	45%	43%	47%	
I need to do well in mathematics to study what I want later.	54%	44%	63%	49%	46%	52%	
I need to keep taking mathematics for the kind of job I want after I leave school.	49%	45%	53%	43%	40%	46%	
Percentage of students indicating they feel "confident following: ‡	" or "very	confiden	t" that the	ey can an	swer ma	thematics	s questions related to the
number sense (e.g., operations with integers, rational numbers, exponents)	50%	38%	61%	47%	39%	54%	
algebra (e.g., solving equations, simplifying expressions with polynomials)	53%	48%	59%	46%	43%	49%	
linear relations (e.g., scatter plots, lines of best fit)	75%	68%	81%	61%	55%	65%	
measurement (e.g., perimeter, area, volume)	73%	68%	78%	69%	66%	71%	
geometry (e.g., angles, parallel lines)	52%	44%	59%	48%	41%	54%	

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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."

		Board		ı	Province	•	
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	All Students (# = 187)	Female* (# = 88)	Male* (# = 99)	All Students (# = 31 979)	Female* (# = 14 068)	Male* (# = 17 911)	
DOING MATHEMATICS							
Percentage of students indicating they do the following problem: †	ng "very o	ften" whe	en studyir	ng mathe	matics or	working (	on a mathematics
I connect new mathematics concepts to what I already know about mathematics or other subjects.	7%	7%	7%	5%	5%	6%	
I check my mathematics answers to see if they make sense.	21%	23%	19%	18%	19%	17%	
I apply new mathematics concepts to real-life problems.	4%	2%	5%	5%	3%	6%	
I take time to discuss my mathematics assignments with my classmates.	4%	3%	4%	6%	6%	6%	
I look for more than one way to solve mathematics problems.	12%	10%	13%	12%	11%	13%	
Percentage of students indicating they complete their	mathem	atics hon	nework at	the follow	wing freq	uencies:	ŧ
I am not usually assigned any mathematics homework	4%	2%	6%	10%	9%	10%	
Never or almost never	10%	11%	8%	8%	7%	9%	
Sometimes	30%	26%	33%	28%	27%	29%	
Often	32%	32%	32%	33%	34%	33%	
Always	23%	26%	20%	18%	22%	16%	

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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, 20					Province			
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	All Students (# = 187)	Female* (# = 88)	Male* (# = 99)	All Students (# = 31 979)	Female* (# = 14 068)	Male* (# = 17 911)		
UT-OF-SCHOOL ACTIVITIES								
Percentage of students indicating they do the following	ng "every	day or al	most eve	ry day" w	hen they	are not a		
I read by myself.	23%	26%	20%	19%	27%	13%		
I use the Internet.	81%	80%	82%	75%	81%	71%		
I play video games.	30%	8%	49%	29%	11%	43%		
I participate in sports or other physical activities.	33%	24%	41%	34%	24%	41%		
I participate in art, music or drama activities.	18%	24%	12%	16%	22%	12%		
I participate in other clubs or organizations.	8%	7%	9%	8%	7%	9%		
I volunteer in my community.	4%	2%	6%	5%	6%	5%		
I work at a paid job.	9%	6%	11%	7%	6%	9%		
SCHOOLS ATTENDED								
Percentage of students indicating the number of sch	ools they	attended	from kind	lergarten	to Grade	8: <sup>‡</sup>		
1 school	42%	45%	38%	27%	26%	27%		
2 schools	36%	36%	36%	30%	30%	30%		
3 schools	11%	9%	12%	19%	19%	19%		
4 schools	3%	3%	2%	11%	11%	11%		
5 or more schools	6%	3%	9%	11%	11%	10%		
LANGUAGES SPOKEN								
Percentage of students indicating that they speak the	e following	j languag	es at hor	ne: ‡				
Only English/Mostly English	88%	86%	90%	78%	78%	78%		
Another language (or other languages) as often as English	6%	8%	5%	13%	13%	12%		
Mostly another language (or other languages)/ Only another language (or other languages)	4%	3%	4%	6%	6%	7%		
Percentage of students indicating the languages pec	ple speak	to them	at home:	Ŧ				
Only English/Mostly English	91%	90%	92%	75%	74%	75%		
Another language (or other languages) as often as English	4%	2%	5%	12%	13%	12%		
Mostly another language (or other languages)/ Only another language (or other languages)	3%	5%	2%	10%	9%	10%		

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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, 20	710 20	Board		Province			
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	All Students (# = 187)	Female* (# = 88)	Male* (# = 99)	All Students (# = 31 979)	Female* (# = 14 068)	Male* (# = 17 911)	
USE OF THE ASSESSMENT IN CLASS MARKS							
Percentage of students indicating their teacher will contain their class mark: †	ount some	or all pa	irts of the	Grade 9	Assessm	ent of Ma	athematics as part of
Yes	59%	64%	55%	45%	48%	43%	
No	1%	1%	1%	2%	2%	3%	
Don't know	39%	33%	43%	49%	47%	51%	
Yes	All Students (# = 110)	Female* (# = 56)	Male* (# = 54)	All Students (# = 14 431)	Female* & (# = 6 707)	Male* (# = 7 724)	
	5%		7%	11%		12%	
Percentage of students indicating that counting the G		4% ssessmer			as part of		
to take the assessment more seriously: †‡							
	All Students (# = 110)	Female* (# = 56)	Male* (# = 54)	All Students (# = 14 431)	Female* (# = 6 707)	Male* (# = 7 724)	
Yes	79%	77%	81%	75%	76%	75%	
No	5%	2%	9%	9%	8%	11%	
Undecided	15%	21%	9%	15%	16%	14%	

Includes only students for whom gender data were available.

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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.

STUDENT QUESTIONNAIRE	RESULTS FOR THIS BOARD (# =632)	
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.	17 24 59	372
I am good at mathematics.	14 25 61	384
I am able to answer difficult mathematics questions.	15 31 53	338
Mathematics is one of my favourite subjects.	36 21 43	271
I understand most of the mathematics I am taught.	7 17 76	479
Mathematics is an easy subject.	31 35 33	211
I do my best in mathematics class.	11 16 72	458
The mathematics I learn now is useful for everyday life.	29 34 35	224
The mathematics I learn now helps me do work in other subjects.	18 27 53	337
I need to do well in mathematics to study what I want later.	10 25 64	407
I need to keep taking mathematics for the kind of job I want after I leave school.	12 25 62	391
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)	25 45 27	169
algebra (e.g., solving equations, simplifying expressions with polynomials)	4 20 44 31	197
linear relations (e.g., scatter plots, lines of best fit)	6 26 46 20	125
analytic geometry (e.g., slope, y-intercept, equations of lines)	7 25 40 26	163
measurement (e.g., perimeter, area, volume)	13 38 45	286
geometry (e.g., angles, parallel lines)	4 18 40 35	224

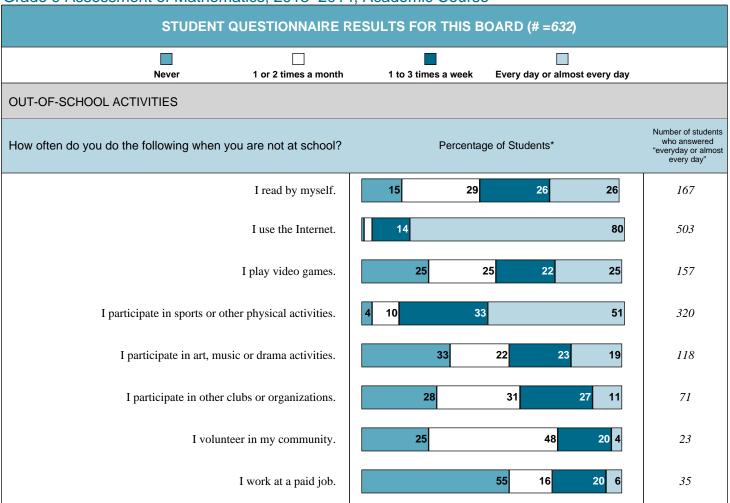
Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

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STUDENT QUES			IS BOARD (# = <i>632</i> )	
Never or almost never	Sometimes	Often	Very Often	
DOING MATHEMATICS				
How often do you do the following when studying or working on a mathematics problem?	mathematics	Perc	centage of Students*	Number of students who answered "very often"
I connect new mathematics concepts to what I alread mathematics or		8	38 37 14	88
I check my mathematics answers to see if the	ey make sense.	4 20	44 30	189
I apply new mathematics concepts to real-	-life problems.	24	47 20 6	39
I take time to discuss my mathematics assigni	ments with my classmates.	21	39 27 11	68
I look for more than one way to solve mathema	atics problems.	10	40 33 15	95
How often do you complete your mathematics ho	omework?	Perc	centage of Students*	Number of students
I am not usually assigned any mathemat	tics homework	[1		8
Never o	r almost never	4		25
	Sometimes	16		99
	Often		41	259
	Always	3	6	225

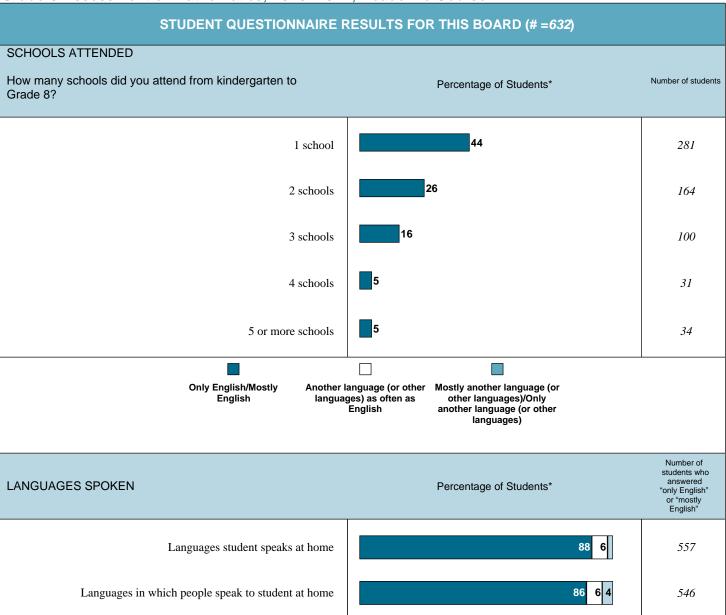
Percentages may not add to 100, due to rounding or to ambiguous responses or blanks. Where there is no number in a bar, the percentage of responses is smaller than four.

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<sup>\*</sup> 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.

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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.

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# STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# =632) USE OF THE ASSESSMENT IN CLASS MARKS Will your teacher count some or all parts of the Grade 9 Percentage of Students\* Assessment of Mathematics as part of your class mark? Number of students Yes 464 5 No 140 Don't know Total number of students: 464 Were you told how much the assessment will count as part of your class mark (e.g., 5%)? † Percentage of Students\* Number of students 95 Yes 439 No 23 Total number of students: 464 Does counting the Grade 9 Assessment of Mathematics as part of your class mark motivate you to take the assessment more Percentage of Students\* Number of students seriously? † Yes 375 No 39 Undecided 47

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<sup>\*</sup> Percentages may not add to 100, due to rounding or to ambiguous responses or blanks.

<sup>†</sup> 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, 2013–2014, Academic Course

Grade 9 Assessment of Mathematics, 20	10 20	Board	20011110		Province	<b>;</b>	
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)		Female* (# = 308)	Male* (# = 324)	All Students (# = 87 038)	Female* (# = 44 893)	Male* (# = 42 145)	
STUDENTS' ATTITUDES TOWARD MATHEMATICS							
Percentage of students indicating they "agree" or "str	ongly agr	ee" with t	he follow	ing state	ments: †		
I like mathematics.	59%	53%	65%	55%	50%	62%	
I am good at mathematics.	61%	55%	66%	55%	49%	62%	
I am able to answer difficult mathematics questions.	53%	41%	65%	46%	38%	55%	
Mathematics is one of my favourite subjects.	43%	37%	48%	39%	34%	45%	
I understand most of the mathematics I am taught.	76%	72%	79%	75%	72%	77%	
Mathematics is an easy subject.	33%	25%	41%	30%	25%	35%	
I do my best in mathematics class.	72%	76%	69%	70%	72%	67%	
The mathematics I learn now is useful for everyday life.	35%	30%	41%	34%	29%	40%	
The mathematics I learn now helps me do work in other subjects.	53%	52%	55%	55%	53%	57%	
I need to do well in mathematics to study what I want later.	64%	60%	69%	63%	60%	66%	
I need to keep taking mathematics for the kind of job I want after I leave school.	62%	59%	65%	58%	55%	61%	
Percentage of students indicating they feel "confident following: ‡	or "very	confiden	it" that the	ey can an	swer ma	thematics	s questions related to the
number sense (e.g., operations with integers, rational numbers, exponents)	72%	64%	79%	70%	63%	77%	
algebra (e.g., solving equations, simplifying expressions with polynomials)	75%	75%	75%	70%	68%	73%	
linear relations (e.g., scatter plots, lines of best fit)	66%	56%	75%	60%	54%	66%	
analytic geometry (e.g., slope, y-intercept, equations of lines)	66%	56%	75%	62%	58%	66%	
measurement (e.g., perimeter, area, volume)	83%	82%	84%	81%	78%	84%	
geometry (e.g., angles, parallel lines)	75%	70%	80%	71%	66%	76%	

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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."

		Board			Province	•	
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE	တ္			si 🧢			
(all students, female, male)	dent 2)	*. 60	<del>(</del>	dent 038	* 893 * * * * * * * * * * * * * * * * * * *	145)	
	All Students (# = 632)	Female* (# = 308)	Male* (# = 324)	All Students (# = 87 038)	Female* (# = 44 893)	N	
	₩ #	# Fe	Ма #	₩ #	# Fe	Male* (# = 42	
DOING MATHEMATICS							
Percentage of students indicating they do the following problem: †	ng "very o	ften" whe	en studyir	ng mather	matics or	working o	on a mathematics
I connect new mathematics concepts to what I already know about mathematics or other subjects.	14%	12%	15%	13%	12%	14%	
I check my mathematics answers to see if they make sense.	30%	31%	28%	31%	33%	29%	
I apply new mathematics concepts to real-life problems.	6%	5%	7%	6%	4%	8%	
I take time to discuss my mathematics assignments with my classmates.	11%	12%	10%	11%	12%	11%	
I look for more than one way to solve mathematics problems.	15%	13%	17%	15%	12%	17%	
Percentage of students indicating they complete their	mathem	atics hon	nework at	the follow	wing freq	uencies: ‡	ŧ
I am not usually assigned any mathematics homework	1%	0%	2%	1%	1%	2%	
Never or almost never	4%	2%	6%	5%	4%	7%	
Sometimes	16%	13%	18%	21%	18%	25%	
Often	41%	42%	40%	38%	38%	38%	
Always	36%	40%	31%	31%	38%	25%	

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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, 20	710 20	Board	ademie		Province		
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)		Female* (# = 308)	Male* (# = 324)	All Students (# = 87 038)	Female* (# = 44 893)	Male* (# = 42 145)	
OUT-OF-SCHOOL ACTIVITIES							
Percentage of students indicating they do the following	ng "every	day or al	most eve	ry day" w	hen they	are not a	
I read by myself.	26%	32%	21%	27%	35%	18%	
I use the Internet.	80%	84%	75%	82%	84%	79%	
I play video games.	25%	6%	43%	22%	7%	39%	
I participate in sports or other physical activities.	51%	45%	56%	40%	33%	48%	
I participate in art, music or drama activities.	19%	22%	16%	18%	23%	13%	
I participate in other clubs or organizations.	11%	10%	12%	11%	10%	12%	
I volunteer in my community.	4%	4%	4%	5%	5%	4%	
I work at a paid job.	6%	3%	8%	5%	4%	5%	
SCHOOLS ATTENDED							
Percentage of students indicating the number of scho	ools they	attended	from kind	lergarten	to Grade	8: <sup>‡</sup>	
1 school	44%	41%	48%	28%	28%	27%	
2 schools	26%	29%	23%	33%	33%	33%	
3 schools	16%	16%	15%	19%	19%	19%	
4 schools	5%	3%	6%	10%	9%	10%	
5 or more schools	5%	7%	4%	7%	8%	7%	
LANGUAGES SPOKEN							
Percentage of students indicating that they speak the	following	g languag	es at hon	ne: ‡			
Only English/Mostly English	88%	89%	88%	72%	73%	71%	
Another language (or other languages) as often as English	6%	6%	6%	16%	16%	15%	
Mostly another language (or other languages)/ Only another language (or other languages)	2%	2%	3%	9%	7%	10%	
Percentage of students indicating the languages peo	ple speak	to them	at home:	‡			
Only English/Mostly English	86%	88%	85%	65%	66%	64%	
Another language (or other languages) as often as English	6%	5%	6%	15%	15%	14%	
Mostly another language (or other languages)/ Only another language (or other languages)	4%	3%	5%	15%	14%	16%	
Only includes students for whom gender data were available.	II .						

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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 5 763633ment of Mathematics, 26		Board			Province		
STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)		Female* (# = 308)	Male* (# = 324)	All Students (# = 87 038)	Female* (# = 44 893)	Male* (# = 42 145)	
USE OF THE ASSESSMENT IN CLASS MARKS							
Percentage of students indicating their teacher will contain their class mark: †	ount some	or all pa	rts of the	Grade 9	Assessm	nent of Ma	athematics as part of
Yes	73%	73%	74%	69%	71%	66%	
No	1%	<1%	1%	1%	1%	2%	
Don't know	22%	23%	22%	25%	23%	28%	
Percentage of students indicating they were told how	much the	e assessr	ment will	count as	part of the	eir class ı	mark: †‡
	All Students (# = 464)	Female* (# = 224)	Male* (# = 240)	All Students (# = 59 884)	Female* (# = 32 030)	Male* (# = 27 854)	
Yes	95%	96%	94%	94%	94%	94%	
No	5%	4%	6%	6%	6%	6%	
Percentage of students indicating that counting the G to take the assessment more seriously: †‡	rade 9 As	ssessmer	nt of Math	nematics	as part of	their cla	ss mark motivates them
	All Students (# = 464)	Female* (# = 224)	Male* (# = 240)	All Students (# = 59 884)	Female* (# = 32 030)	Male* (# = 27 854)	
Yes	81%	84%	78%	77%	79%	75%	
No	8%	5%	12%	10%	7%	13%	
Undecided	10%	10%	10%	13%	13%	12%	

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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, 2013–2014

	EXPLANATION OF TERMS
All Students	Results are reported for all students in the course.
	Results are reported only for those students who took part in the assessment (excludes the "no data" category).
	The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard.
	The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard.
	The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard.
	The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching,</i> the provincial standard.
	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.
	Students who have been identified by the school in accordance with English Language Learners: ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12 (2007).
	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 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 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.

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