



# School Board Report



## Grade 9 Assessment of Mathematics, 2006–2007

### Board: Waterloo Catholic DSB (67148)

I am pleased to provide you with this report on the Grade 9 Assessments of Mathematics for 2006–2007. Included are student results for the current year, those from previous years and, to put these results in context, information about the student populations.

Throughout the province, EQAO data inform professional practice and act as a catalyst for improving student achievement. This report has been designed to assist you in your conversations about improving student achievement and planning interventions for students.

We believe that every student deserves the best outcome from public education. Working with Ontario educators, EQAO continues to design assessments that are directly linked to *The Ontario Curriculum*. These assessments provide a means of measuring student learning at a few critical transition points and are a vehicle for assuring people that, at those points, all Ontario students are being assessed by the same yardstick.

However, large-scale assessment results are just one piece of the picture of how students are doing in our schools. These assessment results should be considered in conjunction with school-based information. As well, regular assessments conducted by a student’s teacher should be the primary method of supporting students in their schooling.

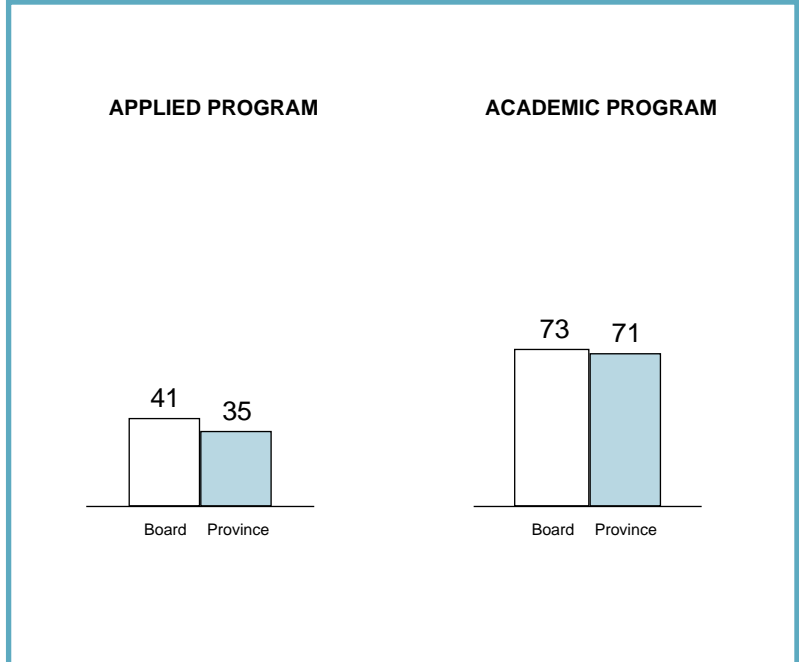
I hope this report will help parents, educators and all who support a strong public education system to work together so that all students achieve their fullest potential.

Sincerely,

Marguerite Jackson  
Chief Executive Officer

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### PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4), 2006–2007

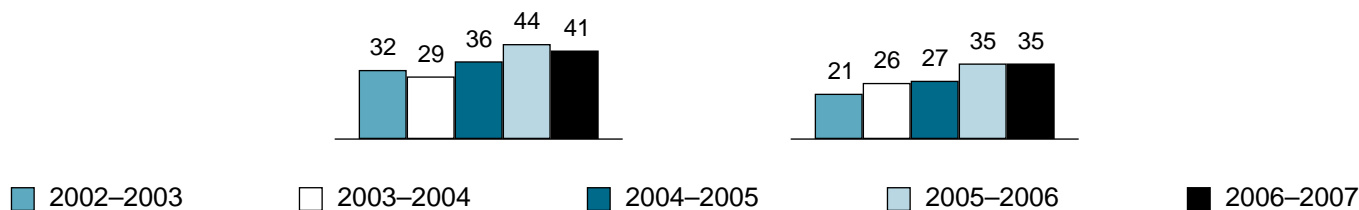


**PERCENTAGE OF ALL STUDENTS AT OR ABOVE THE PROVINCIAL STANDARD (LEVELS 3 AND 4) OVER TIME**

**APPLIED MATHEMATICS\***

**Board**

**Province**



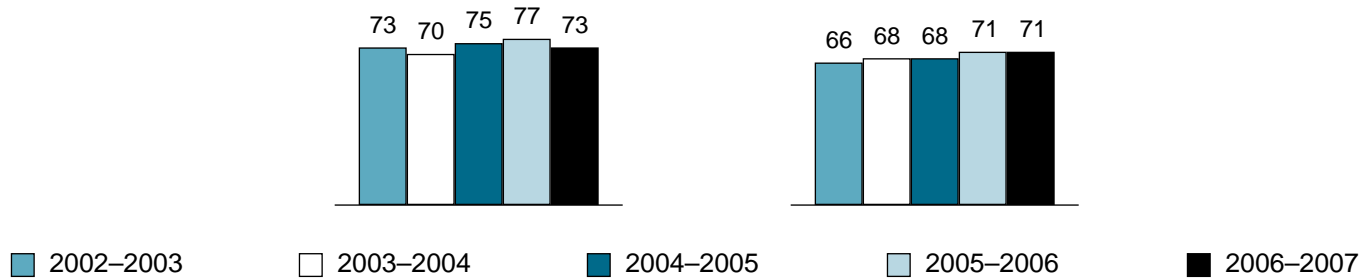
	<b>Total Number of Students</b>				
	<u>2002-2003</u>	<u>2003-2004</u>	<u>2004-2005</u>	<u>2005-2006</u>	<u>2006-2007</u>
Board	563	647	644	627	587
Province	48 426	50 430	51 155	50 687	49 056

\* Note that significant revisions were made to applied program courses in 2004-2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

**ACADEMIC MATHEMATICS**

**Board**

**Province**



	<b>Total Number of Students</b>				
	<u>2002-2003</u>	<u>2003-2004</u>	<u>2004-2005</u>	<u>2005-2006</u>	<u>2006-2007</u>
Board	1 083	1 153	1 255	1 253	1 200
Province	100 717	102 923	104 100	103 412	103 011

## TIPS

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

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



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



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



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



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



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

## WHAT IS IN THIS REPORT?

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

### This report includes

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

### Specifically, you will find

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

## HOW TO USE THIS REPORT

- ◆ Examine the contextual information to understand the similarities and differences between this school, the board and the province; the board and the province. Consider the challenges that any differences might present.
- ◆ Examine the school results for applied and academic mathematics.
  - Are these results consistent with what you would expect?
  - How do the school results compare to the board and province; the board results compare to the province?
  - How do these results compare over time? Note that significant revisions were made to applied program courses in 2004–2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).
  - What influence might students' attitudes have on student performance?
- ◆ Speak to the school principal or the school council chair about the goals for school improvement related to mathematics.

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

Learn more about us at [www.eqao.com](http://www.eqao.com).

## Grade 9 Applied Mathematics Program, 2006–2007

## Contextual Information

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

	Board		Province	
<b>Enrolment</b>				
Number of students in applied mathematics program	587		49 056	
Number of classes with students in applied mathematics program	31		2 909	
Number of schools with applied mathematics classes	5		712	
	Number	Percent	Number	Percent
<b>Participation in the Assessment</b>				
Students who participated in the assessment	565	96%	44 790	91%
Participating students who received one or more accommodations	143	25%	7 172	16%
Participating students who received one or more special provisions	15	3%	814	2%
Students who did not complete any part of the assessment (no data)*	22	4%	4 266	9%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	273	47%	22 126	45%
Male	314	53%	26 926	55%
Gender not specified	0	0%	4	<1%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
ESL/ELD learners*	19	3%	2 396	5%
Students with special needs (excluding gifted)*	216	37%	12 562	26%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	297	51%	21 671	44%
Second-semester course	262	45%	21 969	45%
Full-year course	28	5%	5 416	11%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		42 804	
	548			
Speak only or mostly a language other than English at home	54	10%	2 714	6%
Speak another language as often as English at home	63	11%	4 482	10%
Attended three or more elementary schools from kindergarten to Grade 8	226	41%	17 239	40%

\* See the Explanation of Terms.

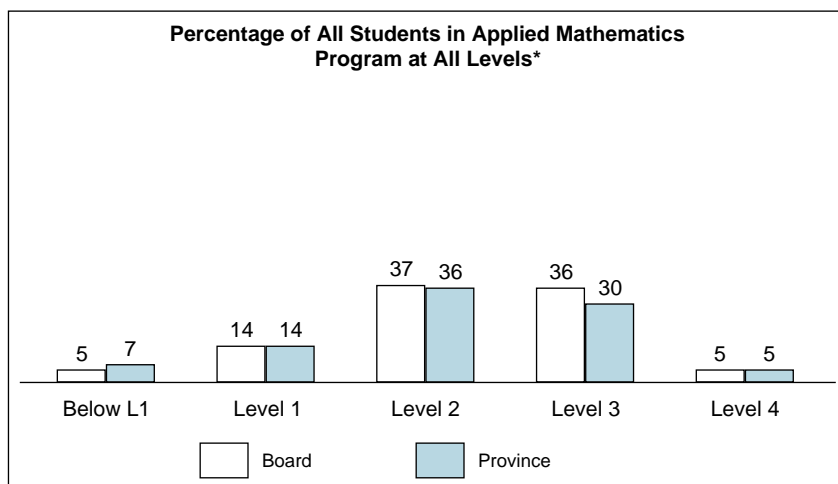
† Demographic information pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school.

†† Demographic information 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 Applied Mathematics Program, 2006–2007

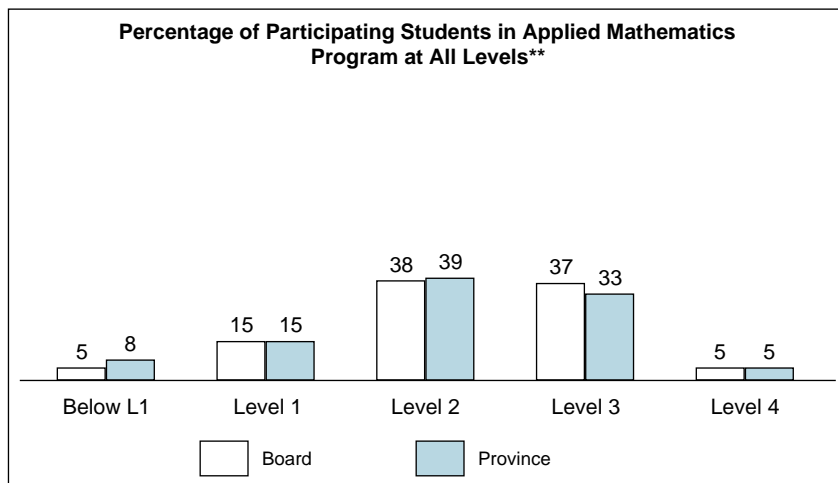
### Results for All Students

All Students, 2006–2007*			
Number of Students	Board 587		Province 49 056
	#	%	%
Level 4	29	5%	5%
Level 3	209	36%	30%
Level 2	216	37%	36%
Level 1	83	14%	14%
Below Level 1	28	5%	7%
Participating Students	565	96%	91%
No Data†	22	4%	9%
At or Above Provincial Standard (Levels 3 and 4) †		41%	35%



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

Participating Students, 2006–2007**			
Number of Students	Board 565		Province 44 790
	#	%	%
Level 4	29	5%	5%
Level 3	209	37%	33%
Level 2	216	38%	39%
Level 1	83	15%	15%
Below Level 1	28	5%	8%
At or Above Provincial Standard (Levels 3 and 4) †		42%	38%



\* 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.

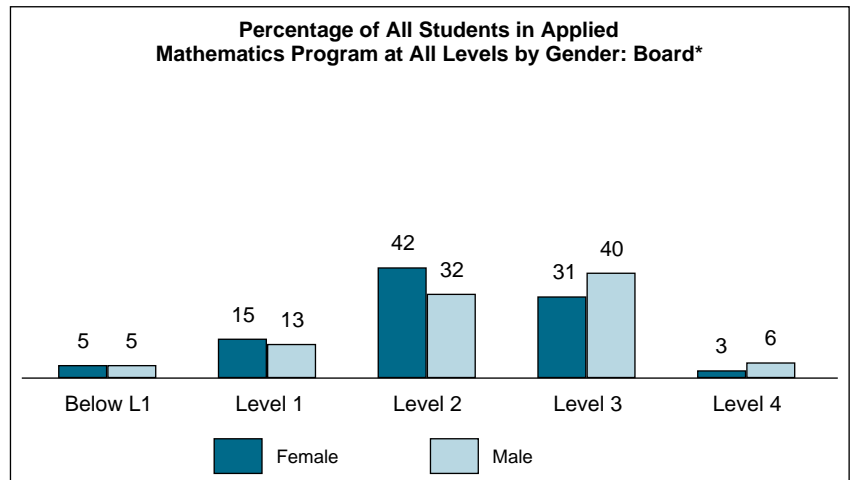
† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

‡ Students who were coded "exempt" were placed in the "no data" category.

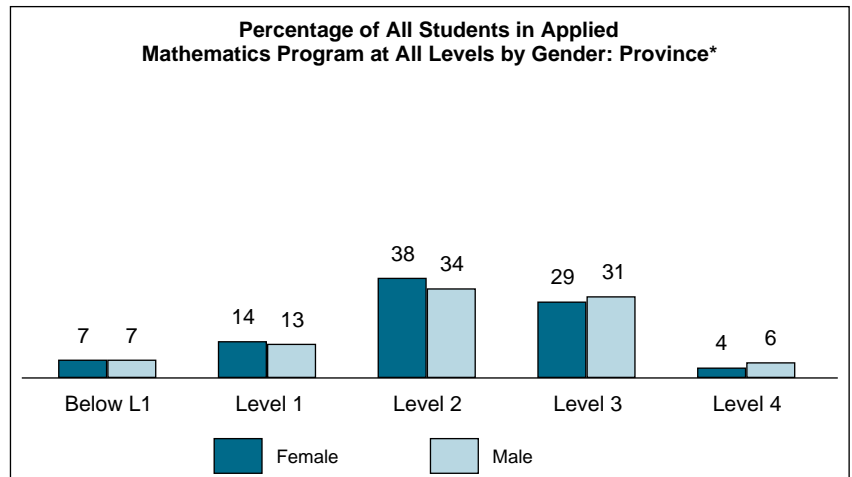
Grade 9 Applied Mathematics Program, 2006–2007

Results by Gender††

All Students, 2006–2007: Board by Gender*				
Number of Students	Female 273		Male 314	
	#	%	#	%
Level 4	9	3%	20	6%
Level 3	84	31%	125	40%
Level 2	115	42%	101	32%
Level 1	42	15%	41	13%
Below Level 1	13	5%	15	5%
Participating Students	263	96%	302	96%
No Data‡	10	4%	12	4%
At or Above Provincial Standard (Levels 3 and 4)†	34%		46%	



All Students, 2006–2007: Province by Gender*				
Number of Students	Female 22 126		Male 26 926	
	#	%	#	%
Level 4	807	4%	1 550	6%
Level 3	6 416	29%	8 470	31%
Level 2	8 402	38%	9 091	34%
Level 1	3 183	14%	3 445	13%
Below Level 1	1 458	7%	1 968	7%
Participating Students	20 266	92%	24 524	91%
No Data‡	1 860	8%	2 402	9%
At or Above Provincial Standard (Levels 3 and 4)†	33%		37%	



\* 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.  
 ‡ Students who were coded “exempt” were placed in the “no data” category.

## Grade 9 Academic Mathematics Program, 2006–2007

## Contextual Information

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

	Board		Province	
<b>Enrolment</b>				
Number of students in academic mathematics program	1 200		103 011	
Number of classes with students in academic mathematics program	44		4 169	
Number of schools with academic mathematics classes	5		679	
	Number	Percent	Number	Percent
<b>Participation in the Assessment</b>				
Students who participated in the assessment	1 188	99%	101 426	98%
Participating students who received one or more accommodations	67	6%	2 265	2%
Participating students who received one or more special provisions	6	1%	1 204	1%
Students who did not complete any part of the assessment (no data)*	12	1%	1 585	2%
<b>Gender<sup>†</sup> Based on number of students enrolled</b>				
Female	596	50%	52 887	51%
Male	604	50%	50 122	49%
Gender not specified	0	0%	2	<1%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>				
ESL/ELD learners*	13	1%	3 118	3%
Students with special needs (excluding gifted)*	142	12%	3 913	4%
<b>Semester/Full Year Based on number of students enrolled</b>				
First-semester course	655	55%	44 087	43%
Second-semester course	545	45%	44 267	43%
Full-year course	0	0%	14 657	14%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>				
	Number of Respondents:		98 764	
Speak only or mostly a language other than English at home	90	8%	8 522	9%
Speak another language as often as English at home	129	11%	13 200	13%
Attended three or more elementary schools from kindergarten to Grade 8	324	27%	34 728	35%

\* See the Explanation of Terms.

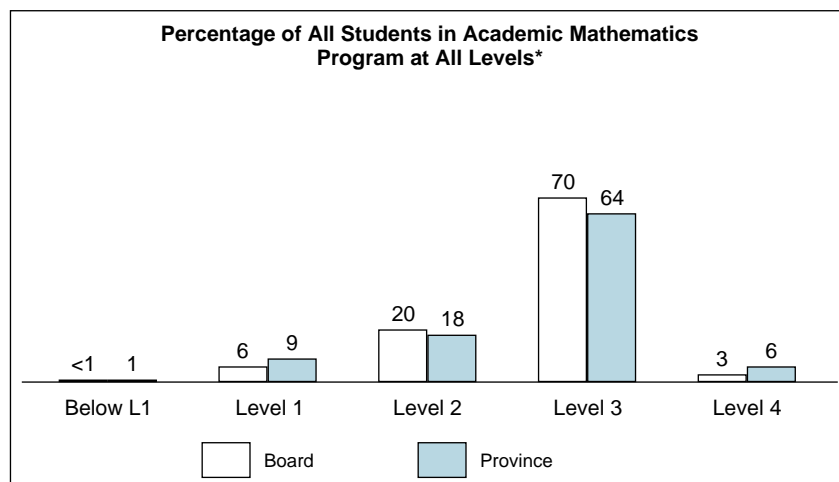
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†† Demographic information pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

## Grade 9 Academic Mathematics Program, 2006–2007

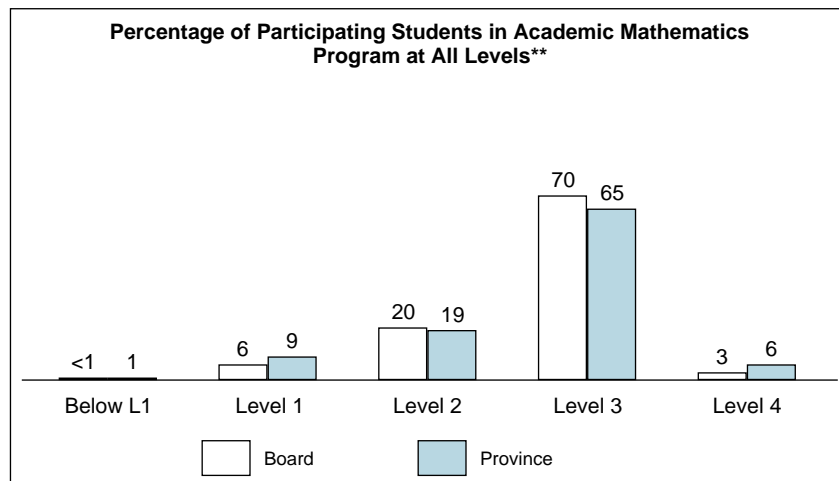
### Results for All Students

All Students, 2006–2007*			
Number of Students	Board 1 200		Province 103 011
	#	%	%
Level 4	39	3%	6%
Level 3	835	70%	64%
Level 2	234	20%	18%
Level 1	76	6%	9%
Below Level 1	4	<1%	1%
Participating Students	1 188	99%	98%
No Data†	12	1%	2%
At or Above Provincial Standard (Levels 3 and 4) †		73%	71%



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

Participating Students, 2006–2007**			
Number of Students	Board 1 188		Province 101 426
	#	%	%
Level 4	39	3%	6%
Level 3	835	70%	65%
Level 2	234	20%	19%
Level 1	76	6%	9%
Below Level 1	4	<1%	1%
At or Above Provincial Standard (Levels 3 and 4) †		74%	72%



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

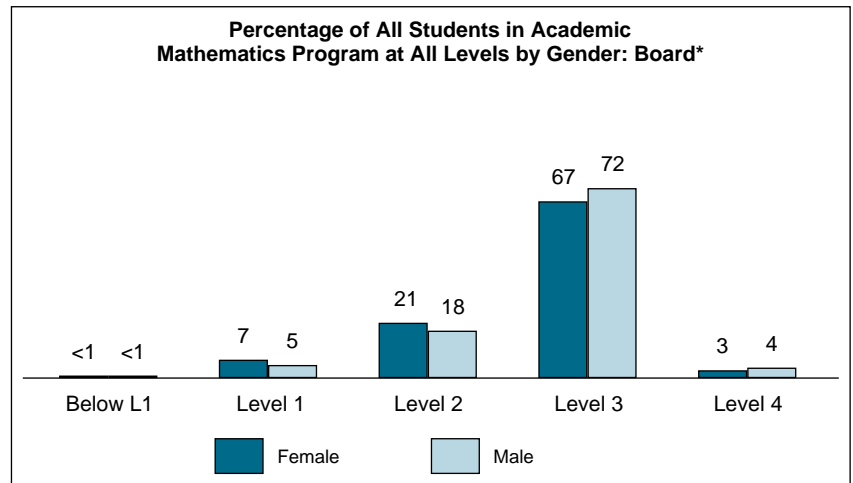
† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

‡ Students who were coded "exempt" were placed in the "no data" category.

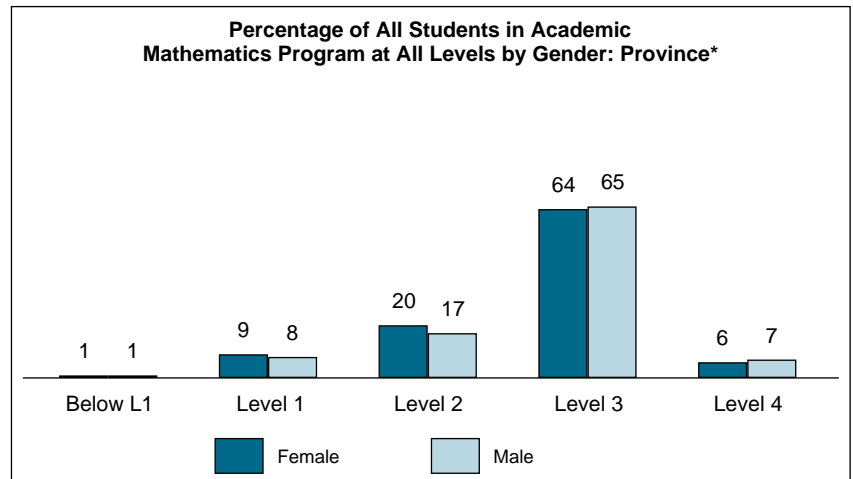
## Grade 9 Academic Mathematics Program, 2006–2007

### Results by Gender††

All Students, 2006–2007: Board by Gender*				
Number of Students	Female 596		Male 604	
	#	%	#	%
Level 4	17	3%	22	4%
Level 3	401	67%	434	72%
Level 2	126	21%	108	18%
Level 1	44	7%	32	5%
Below Level 1	1	<1%	3	<1%
Participating Students	589	99%	599	99%
No Data‡	7	1%	5	1%
At or Above Provincial Standard (Levels 3 and 4)†	70%		75%	



All Students, 2006–2007: Province by Gender*				
Number of Students	Female 52 887		Male 50 122	
	#	%	#	%
Level 4	2 921	6%	3 556	7%
Level 3	33 786	64%	32 524	65%
Level 2	10 388	20%	8 591	17%
Level 1	4 695	9%	4 165	8%
Below Level 1	311	1%	489	1%
Participating Students	52 101	99%	49 325	98%
No Data‡	786	1%	797	2%
At or Above Provincial Standard (Levels 3 and 4)†	69%		72%	



\* 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.

‡ Students who were coded “exempt” were placed in the “no data” category.

## Results over Time, 2002–2003 to 2006–2007

### Contextual Information for Board: Applied Mathematics Program

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

	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007
<b>Enrolment</b>					
Number of students in applied mathematics program	563	647	644	627	587
Number of classes with students in applied mathematics program	26	28	29	35	31
Number of schools with applied mathematics classes	n/a	5	5	5	5
<b>Participation in the Assessment</b>					
Students who participated in the assessment	93%	94%	95%	94%	96%
Participating students who received one or more accommodations	n/a	28%	35%	32%	25%
Participating students who received one or more special provisions	n/a	6%	6%	2%	3%
Students who did not complete any part of the assessment (no data)*	6%	6%	5%	6%	4% <sup>++</sup>
Students who were exempted*	1%	0%	<1%	<1%	--
<b>Gender<sup>†</sup> Based on number of students enrolled</b>					
Female	47%	48%	41%	49%	47%
Male	53%	52%	55%	51%	53%
Gender not specified	n/a	<1%	4%	0%	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>					
ESL/ELD learners*	2% <sup>+</sup>	2%	2%	2%	3%
Students with special needs (excluding gifted)*	29%	32%	31%	41%	37%
<b>Semester/Full Year Based on number of students enrolled</b>					
First-semester course	54%	40%	42%	53%	51%
Second-semester course	46%	40%	39%	45%	45%
Full-year course	0%	20%	19%	2%	5%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>					
Number of Respondents:	n/a	n/a	n/a	n/a	548
Speak only or mostly a language other than English at home					10%
Speak another language as often as English at home	Information not available				11%
Attended three or more elementary schools from kindergarten to Grade 8					41%

\* See the Explanation of Terms.

† Demographic information 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.

+ The percentage of students in this group may not be comparable with those of later years as the definition for the ESL/ELD group changed in 2004 from "students enrolled in an ESL/ELD program" to "students designated as ESL/ELD learners".

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

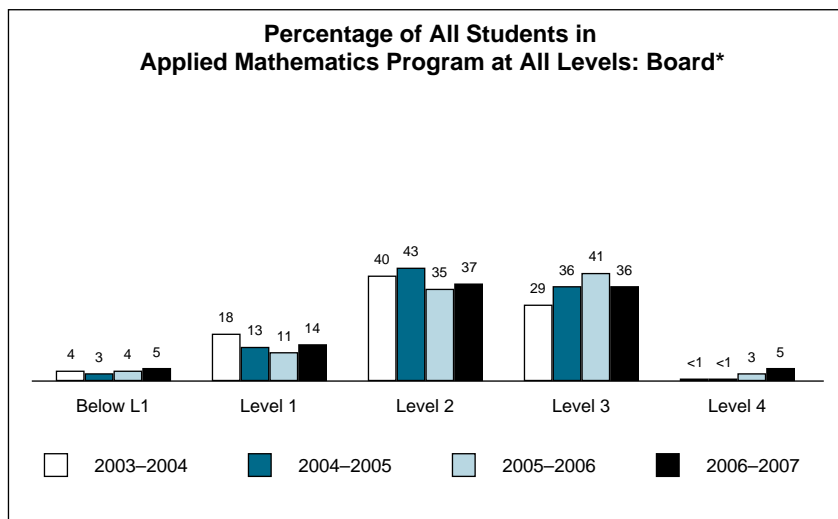
†† Demographic information pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

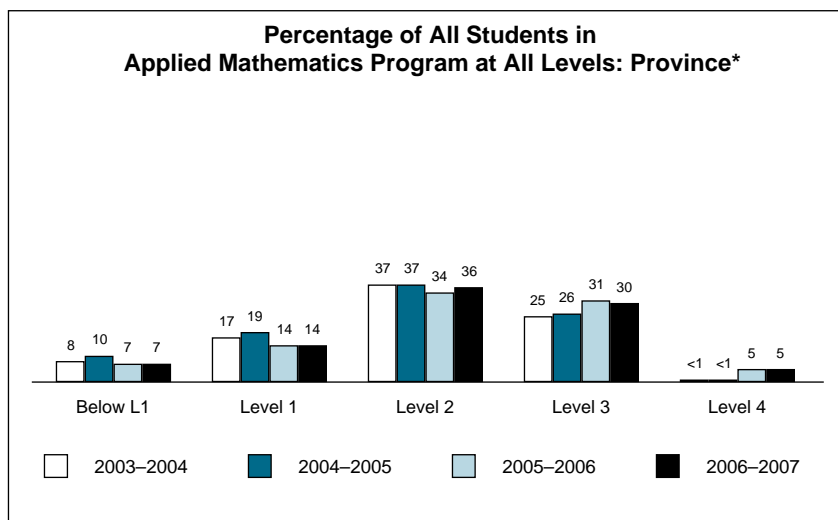
Results over Time, 2003–2004 to 2006–2007

**Applied Mathematics Program for All Students\*\***

Board*				
Year	'03-'04	'04-'05	'05-'06	'06-'07
<i>Number of Students</i>	647	644	627	587
Level 4	<1%	<1%	3%	5%
Level 3	29%	36%	41%	36%
Level 2	40%	43%	35%	37%
Level 1	18%	13%	11%	14%
Below Level 1	4%	3%	4%	5%
NEIS††	3%	---	---	---
<i>Participating Students</i>	94%	95%	94%	96%
No Data	6%	5%	6%	4%
Exempt‡	0%	<1%	<1%	---
At or Above Provincial Standard (Levels 3 and 4)†	29%	36%	44%	41%



Province*				
Year	'03-'04	'04-'05	'05-'06	'06-'07
<i>Number of Students</i>	50 430	51 155	50 687	49 056
Level 4	<1%	<1%	5%	5%
Level 3	25%	26%	31%	30%
Level 2	37%	37%	34%	36%
Level 1	17%	19%	14%	14%
Below Level 1	8%	10%	7%	7%
NEIS††	5%	---	---	---
<i>Participating Students</i>	92%	93%	90%	91%
No Data	6%	6%	8%	9%
Exempt‡	1%	1%	2%	---
At or Above Provincial Standard (Levels 3 and 4)†	26%	27%	35%	35%



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

\*\* Note that significant revisions were made to applied program courses in 2004–2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

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

†† The NEIS category was eliminated in 2004–2005. See the Explanation of Terms.

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

## Results over Time, 2002–2003 to 2006–2007

### Contextual Information for Board: Academic Mathematics Program

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

	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007
<b>Enrolment</b>					
Number of students in academic mathematics program	1 083	1 153	1 255	1 253	1 200
Number of classes with students in academic mathematics program	41	45	51	51	44
Number of schools with academic mathematics classes	n/a	5	5	5	5
<b>Participation in the Assessment</b>					
Students who participated in the assessment	99%	99%	99%	99%	99%
Participating students who received one or more accommodations	n/a	3%	4%	5%	6%
Participating students who received one or more special provisions	n/a	2%	1%	1%	1%
Students who did not complete any part of the assessment (no data)*	1%	<1%	1%	1%	1% <sup>++</sup>
Students who were exempted*	<1%	<1%	0%	0%	--
<b>Gender<sup>†</sup> Based on number of students enrolled</b>					
Female	54%	53%	49%	52%	50%
Male	46%	47%	51%	48%	50%
Gender not specified	n/a	<1%	<1%	0%	0%
<b>Student Status<sup>†</sup> Based on number of students enrolled</b>					
ESL/ELD learners*	1% <sup>+</sup>	1%	1%	1%	1%
Students with special needs (excluding gifted)*	7%	6%	5%	10%	12%
<b>Semester/Full Year Based on number of students enrolled</b>					
First-semester course	48%	43%	39%	51%	55%
Second-semester course	52%	35%	39%	49%	45%
Full-year course	0%	22%	22%	0%	0%
<b>Language and School Background<sup>††</sup> Based on Student Questionnaire data</b>					
Number of Respondents:	n/a	n/a	n/a	n/a	1 182
Speak only or mostly a language other than English at home					8%
Speak another language as often as English at home	Information not available				11%
Attended three or more elementary schools from kindergarten to Grade 8					27%

\* See the Explanation of Terms.

† Demographic information 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.

⊕ The percentage of students in this group may not be comparable with those of later years as the definition for the ESL/ELD group changed in 2004 from "students enrolled in an ESL/ELD program" to "students designated as ESL/ELD learners".

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

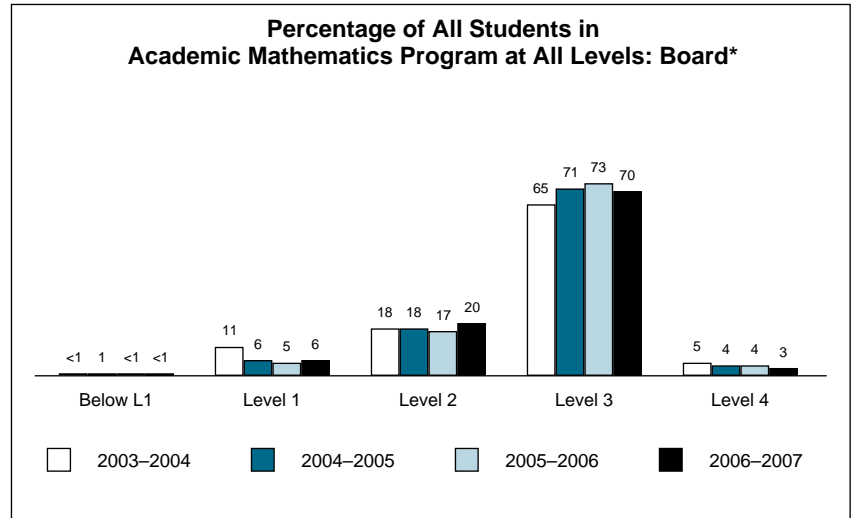
†† Demographic information pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

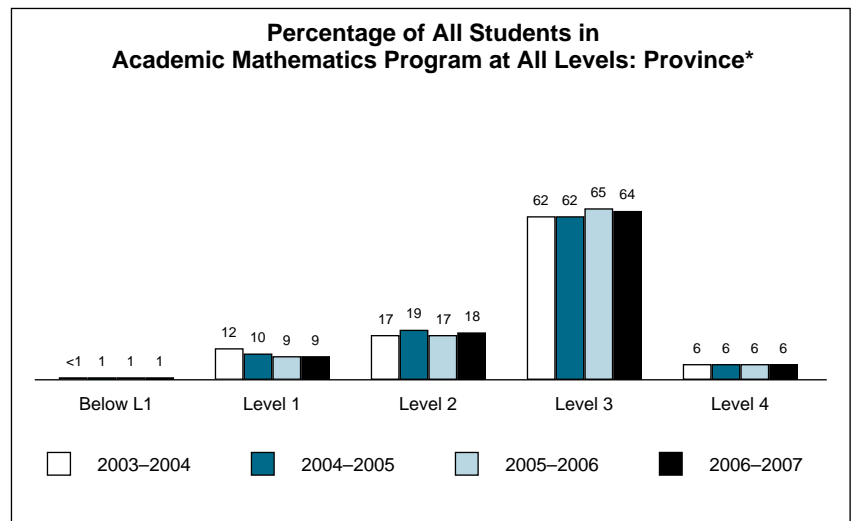
Results over Time, 2003–2004 to 2006–2007

Academic Mathematics Program for All Students

Board*				
Year	'03-'04	'04-'05	'05-'06	'06-'07
<i>Number of Students</i>	1 153	1 255	1 253	1 200
Level 4	5%	4%	4%	3%
Level 3	65%	71%	73%	70%
Level 2	18%	18%	17%	20%
Level 1	11%	6%	5%	6%
Below Level 1	<1%	1%	<1%	<1%
NEIS††	<1%	---	---	---
<i>Participating Students</i>	99%	99%	99%	99%
No Data	<1%	1%	1%	1%
Exempt‡	<1%	0%	0%	---
At or Above Provincial Standard (Levels 3 and 4)†	70%	75%	77%	73%



Province*				
Year	'03-'04	'04-'05	'05-'06	'06-'07
<i>Number of Students</i>	102 923	104 100	103 412	103 011
Level 4	6%	6%	6%	6%
Level 3	62%	62%	65%	64%
Level 2	17%	19%	17%	18%
Level 1	12%	10%	9%	9%
Below Level 1	<1%	1%	1%	1%
NEIS††	1%	---	---	---
<i>Participating Students</i>	99%	99%	98%	98%
No Data	1%	1%	1%	2%
Exempt‡	<1%	<1%	<1%	---
At or Above Provincial Standard (Levels 3 and 4)†	68%	68%	71%	71%



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

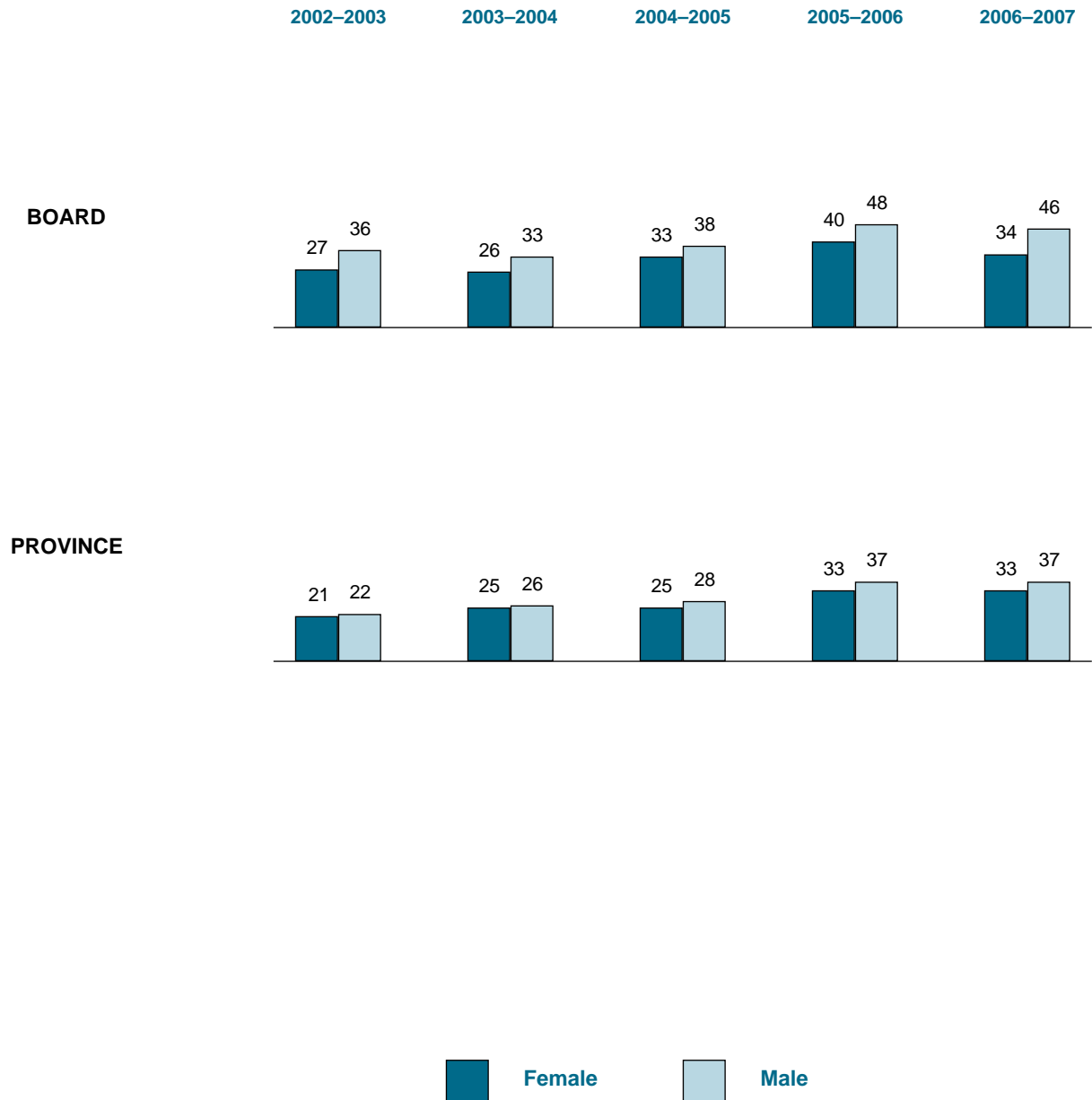
† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

†† The NEIS category was eliminated in 2004–2005. See the Explanation of Terms.

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

**RESULTS FOR ALL STUDENTS OVER TIME BY GENDEF† AT THIS BOARD**

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



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

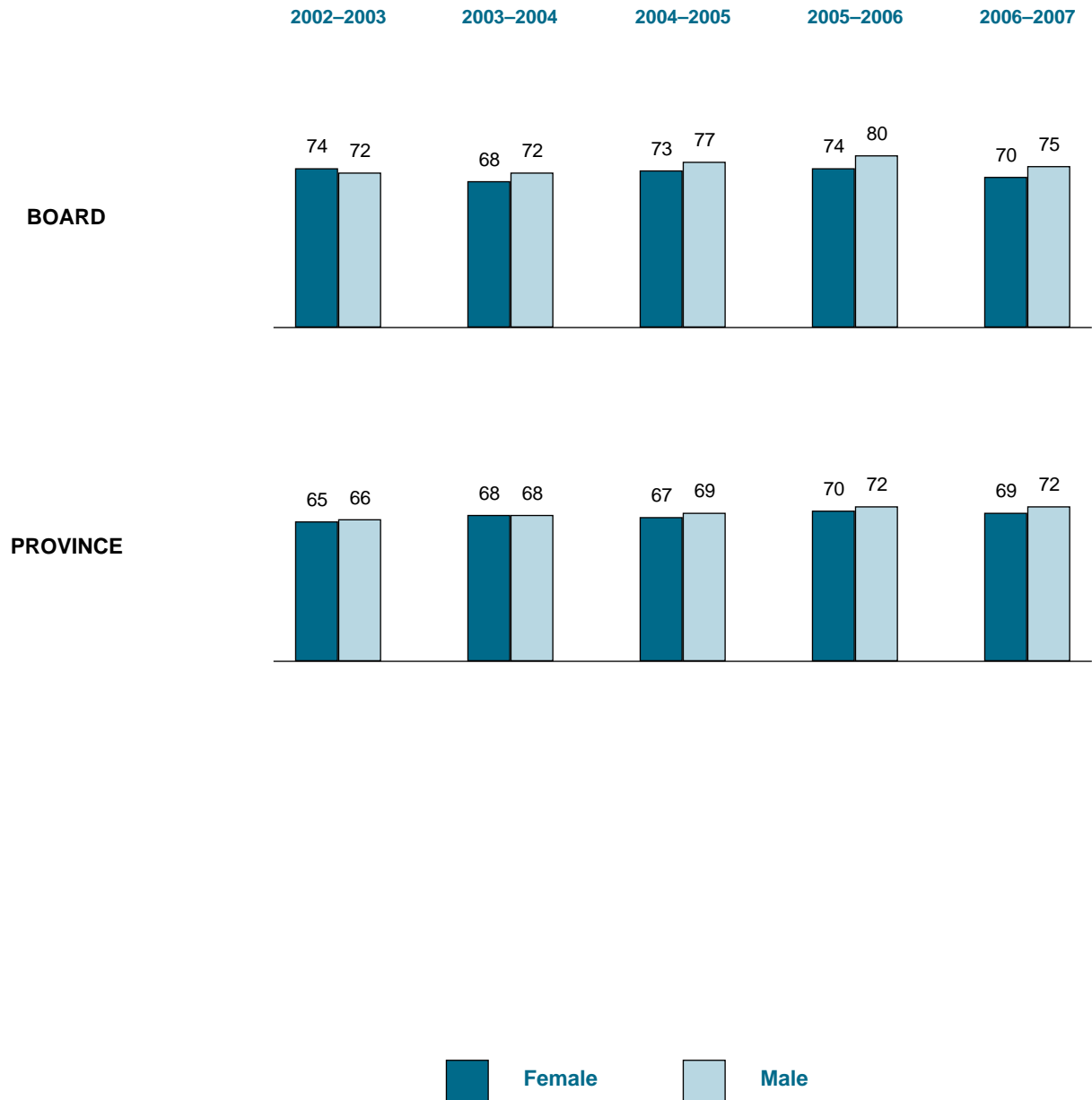
	2002-2003		2003-2004		2004-2005		2005-2006		2006-2007	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	262	300	308	338	263	355	307	320	273	314
Province	21 387	26 625	22 292	27 223	22 371	27 413	22 884	27 802	22 126	26 926

† Includes only students for whom gender data were available.

\* Note that significant revisions were made to applied program courses in 2004-2005 as reflected in *The Ontario Curriculum, Grades 9 and 10: Mathematics* (revised 2005).

**RESULTS FOR ALL STUDENTS OVER TIME BY GENDER† AT THIS BOARD**

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



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

	2002-2003		2003-2004		2004-2005		2005-2006		2006-2007	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Board	580	503	608	543	614	639	655	598	596	604
Province	51 352	48 750	52 104	49 916	52 030	50 129	53 183	50 228	52 887	50 122

† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2006–2007, Applied Program

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 548)			
Questionnaire Item	Percentage of Students*		
<b>1. Degree to which students “agree” or “disagree” with each of the following statements:</b>			Number of Students Who Answered “Strongly Agree or Agree”
I like mathematics.			173
I am good at mathematics.			165
I understand most of the mathematics I am taught.			313
The mathematics I learn now is very useful for everyday life.			224
I need to keep taking mathematics for the kind of job I want after I leave school.			235
Mathematics is boring.			255
Mathematics is an easy subject.			98
<b>2. How “easy” or “hard” students find mathematics questions that deal with the following:</b>			Number of Students Who Answered “Very Easy or Easy”
number sense (e.g., operations with integers, rational numbers, exponents)			227
algebra (e.g., solving equations, simplifying expressions with polynomials)			238
linear relations (e.g., scatter plots, lines of best fit)			347
measurement (e.g., perimeter, surface area, volume)			351
geometry (e.g., angles, quadrilaterals)			211

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

Grade 9 Assessment of Mathematics, 2006–2007, Applied Program

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 548)		
Questionnaire Item	Percentage of Students*	
<b>3. Students have the following at home to use for mathematics school work:</b>		Number of Students Who Answered "Yes"
a computer		228
a scientific calculator		376
a graphing calculator		36
<b>4. Amount of time students usually spend on mathematics homework (in or out of school) on any given day:</b>		Number of Students
more than 45 minutes		69
between 31 and 45 minutes		123
30 minutes or less		234
mathematics homework not usually assigned		112
<b>5. How often students complete all of their mathematics homework:</b>		Number of Students
never or seldom		82
sometimes		177
often or always		282
<b>6. How often students have been absent from their Grade 9 mathematics class this year:</b>		Number of Students
never		74
one to four times		269
five to nine times		112
10 or more times		84

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

Grade 9 Assessment of Mathematics, 2006–2007, Applied Program

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 548)		
Questionnaire Item	Percentage of Students*	
<b>7. How often students have been late for their Grade 9 mathematics class this year:</b>		Number of Students
never	29	157
one to four times	37	205
five to nine times	17	92
10 or more times	16	88
<b>8. Language(s) students speak at home:</b>		Number of Students
only or mostly English	77	423
another language (or languages) as often as English	11	63
only or mostly another language (or other languages)	10	54
<b>9. Number of elementary schools (kindergarten to Grade 8) attended:</b>		Number of Students
one or two schools	57	315
three schools	21	115
four schools	9	52
five schools or more	11	59

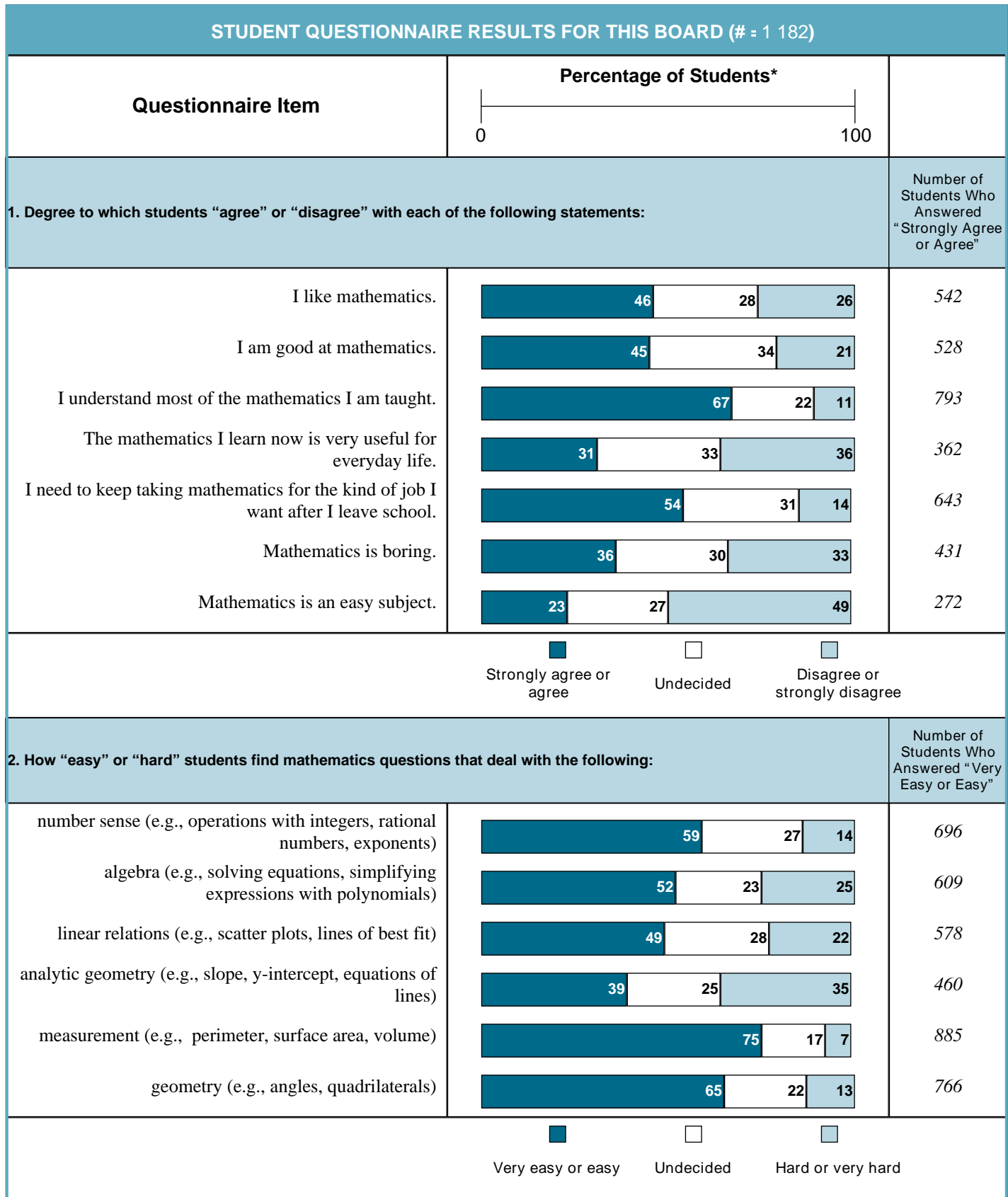
\* Percentages may not add to 100, due to a lack of or ambiguous responses.

Grade 9 Assessment of Mathematics, 2006–2007, Applied Program

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 548)	Female* (# = 255)	Male* (# = 293)	All Students (# = 42 804)	Female* (# = 19 453)	Male* (# = 23 351)
<b>Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:</b>						
I like mathematics.	32%	27%	35%	34%	28%	40%
I am good at mathematics.	30%	21%	38%	34%	25%	41%
I understand most of the mathematics I am taught.	57%	55%	59%	61%	57%	65%
The mathematics I learn now is very useful for everyday life.	41%	36%	45%	40%	36%	42%
I need to keep taking mathematics for the kind of job I want after I leave school.	43%	40%	46%	43%	38%	46%
Mathematics is boring.	47%	47%	46%	43%	44%	41%
Mathematics is an easy subject.	18%	15%	21%	22%	16%	26%
<b>Percentage of students indicating that the following are “very easy” or “easy”:</b>						
number sense	41%	36%	46%	46%	43%	49%
algebra	43%	44%	43%	42%	43%	42%
linear relations	63%	68%	59%	61%	59%	61%
measurement	64%	64%	65%	64%	63%	65%
geometry	39%	33%	43%	42%	37%	46%
<b>Percentage of students indicating they have the following at home to use for mathematics school work:</b>						
a computer	42%	41%	42%	42%	43%	42%
a scientific calculator	69%	76%	62%	72%	76%	70%
a graphing calculator	7%	5%	8%	8%	7%	9%
<b>Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:</b>						
30 minutes or less	43%	39%	46%	46%	45%	47%
more than 30 minutes	35%	37%	33%	35%	38%	31%
mathematics homework not usually assigned	20%	23%	18%	18%	15%	19%
<b>Percentage of students indicating they complete all of their mathematics homework</b>						
never or seldom.	15%	11%	18%	16%	13%	18%
sometimes, often or always.	84%	87%	81%	82%	85%	80%
<b>Percentage of students indicating they have been absent from their mathematics class this year</b>						
four times or less.	63%	61%	64%	59%	57%	61%
five times or more.	36%	38%	34%	39%	42%	38%
<b>Percentage of students indicating how often they have been late for their mathematics class this year</b>						
four times or less.	66%	69%	63%	70%	71%	69%
five times or more.	33%	30%	35%	28%	27%	29%
<b>Percentage of students indicating that they speak the following language(s) at home:</b>						
only or mostly English	77%	76%	78%	82%	82%	81%
another language (or languages) as often as English	11%	15%	8%	10%	11%	10%
only or mostly another language (or other languages)	10%	7%	12%	6%	5%	7%
<b>Percentage of students indicating that from kindergarten to Grade 8 they attended</b>						
three or more elementary schools.	41%	44%	39%	40%	41%	40%

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

Grade 9 Assessment of Mathematics, 2006–2007, Academic Program



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

Grade 9 Assessment of Mathematics, 2006–2007, Academic Program

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 182)		
Questionnaire Item	Percentage of Students*	
<b>3. Students have the following at home to use for mathematics school work:</b>		Number of Students Who Answered "Yes"
a computer		633
a scientific calculator		1 011
a graphing calculator		56
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<b>4. Amount of time students usually spend on mathematics homework (in or out of school) on any given day:</b>		Number of Students
more than 45 minutes		265
between 31 and 45 minutes		449
30 minutes or less		436
mathematics homework not usually assigned		17
<b>5. How often students complete all of their mathematics homework:</b>		Number of Students
never or seldom		156
sometimes		283
often or always		729
<b>6. How often students have been absent from their Grade 9 mathematics class this year:</b>		Number of Students
never		191
one to four times		700
five to nine times		186
10 or more times		91

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

Grade 9 Assessment of Mathematics, 2006–2007, Academic Program

STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 1 182)		
Questionnaire Item	Percentage of Students*	
<b>7. How often students have been late for their Grade 9 mathematics class this year:</b>		Number of Students
never	46	549
one to four times	37	434
five to nine times	8	96
10 or more times	7	86
<b>8. Language(s) students speak at home:</b>		Number of Students
only or mostly English	80	948
another language (or languages) as often as English	11	129
only or mostly another language (or other languages)	8	90
<b>9. Number of elementary schools (kindergarten to Grade 8) attended:</b>		Number of Students
one or two schools	71	842
three schools	15	176
four schools	7	81
five schools or more	6	67

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

Grade 9 Assessment of Mathematics, 2006–2007, Academic Program

STUDENT QUESTIONNAIRE RESULTS FOR BOARD AND PROVINCE (all students, female, male)	Board			Province		
	All Students (# = 1 182)	Female* (# = 588)	Male* (# = 594)	All Students (# = 98 764)	Female* (# = 50 835)	Male* (# = 47 929)
<b>Percentage of students indicating that they “strongly agree” or “agree” with each of the following statements:</b>						
I like mathematics.	46%	44%	48%	52%	47%	57%
I am good at mathematics.	45%	38%	52%	50%	43%	57%
I understand most of the mathematics I am taught.	67%	65%	69%	71%	67%	74%
The mathematics I learn now is very useful for everyday life.	31%	30%	32%	36%	33%	39%
I need to keep taking mathematics for the kind of job I want after I leave school.	54%	51%	58%	55%	53%	58%
Mathematics is boring.	36%	32%	40%	31%	31%	32%
Mathematics is an easy subject.	23%	18%	28%	27%	22%	32%
<b>Percentage of students indicating that the following are “very easy” or “easy”:</b>						
number sense	59%	56%	61%	67%	64%	70%
algebra	52%	52%	51%	60%	61%	59%
linear relations	49%	48%	50%	48%	45%	51%
analytic geometry	39%	37%	41%	41%	38%	44%
measurement	75%	76%	74%	75%	73%	77%
geometry	65%	63%	67%	63%	60%	67%
<b>Percentage of students indicating they have the following at home to use for mathematics school work:</b>						
a computer	54%	56%	51%	52%	54%	51%
a scientific calculator	86%	90%	81%	86%	88%	83%
a graphing calculator	5%	4%	5%	9%	8%	9%
<b>Percentage of students indicating they usually spend the following amounts of time on mathematics homework (in or out of school) on any given day:</b>						
30 minutes or less	37%	31%	43%	38%	32%	44%
more than 30 minutes	60%	67%	54%	58%	65%	51%
mathematics homework not usually assigned	1%	1%	2%	3%	2%	4%
<b>Percentage of students indicating they complete all of their mathematics homework</b>						
never or seldom.	13%	9%	17%	12%	9%	15%
sometimes, often or always.	86%	90%	81%	87%	90%	84%
<b>Percentage of students indicating they have been absent from their mathematics class this year</b>						
four times or less.	75%	73%	77%	73%	72%	74%
five times or more.	23%	26%	21%	25%	26%	24%
<b>Percentage of students indicating how often they have been late for their mathematics class this year</b>						
four times or less.	83%	85%	81%	84%	86%	83%
five times or more.	15%	14%	17%	14%	13%	15%
<b>Percentage of students indicating that they speak the following language(s) at home:</b>						
only or mostly English	80%	80%	81%	77%	77%	76%
another language (or languages) as often as English	11%	11%	10%	13%	14%	13%
only or mostly another language (or other languages)	8%	8%	7%	9%	8%	10%
<b>Percentage of students indicating that from kindergarten to Grade 8 they attended</b>						
three or more elementary schools.	27%	29%	26%	35%	35%	35%

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

## EXPLANATION OF TERMS

<b>All Students</b>	Results are reported for all students in the program.
<b>Participating Students</b>	Results are reported only for those students who took part in the assessment (excludes the "no data" category).
<b>Provincial Standard</b>	The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard.
<b>Level 4 (80-100%)</b>	The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard.
<b>Level 3 (70-79%)</b>	The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard.
<b>Level 2 (60-69%)</b>	The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching</i> , the provincial standard.
<b>Level 1 (50-59%)</b>	The student has demonstrated a passable level of achievement. Achievement is <i>below</i> the provincial standard.
<b>Below Level 1</b>	The student has not demonstrated sufficient achievement of curriculum expectations (below 50%).
<b>NEIS</b>	"Not Enough Information to Score" is a category that was eliminated in 2004–2005. Students now are assigned a level based on the work they submitted, with unanswered questions treated as incorrect.
<b>No Data</b>	Students who did not complete any part of the assessment due to absence or for medical or other reasons.
<b>Exempt</b>	In 2006–2007, students who were coded "exempt" were placed in the "no data" category.
<b>ESL/ELD</b>	English as a second language (ESL)/English literacy development (ELD) are students identified by the school as ESL/ELD learners.
<b>Students with Special Needs</b>	Students formally identified by an Identification, Placement and Review Committee and/or students who have an Individual Education Plan. Students identified as gifted are not included.
<b>N/R</b>	"Not reported" indicates that the number of students participating (fewer than 15 in a group) or responding to the Student Questionnaire (fewer than six in a group) is so small that identification of individual student results might be possible; therefore, results are not reported.
<b>N/D</b>	Used in tables and graphs to indicate that there were no students in the grade or program for the years specified.