



School Board Report



Grade 9 Assessment of Mathematics, 2008–2009

Board: Peel District School Board (66125)

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

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

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

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

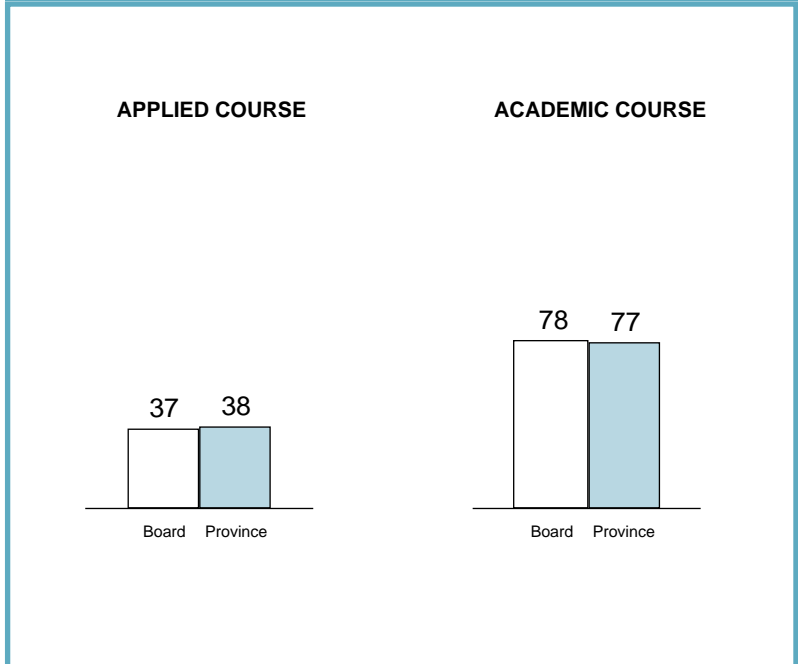
I trust this report will help parents, educators and all who support a strong public education system work together so that all students can reach their full potential.

Sincerely,

Marguerite Jackson
 Chief Executive Officer
 Education Quality and Accountability Office

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



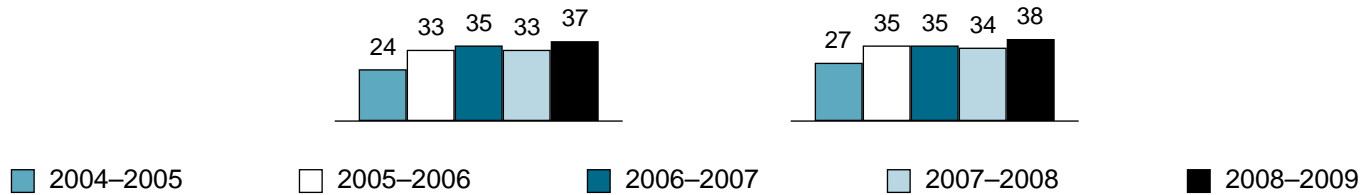
Grade 9 Assessment of Mathematics, 2008–2009

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

APPLIED MATHEMATICS*

Board

Province



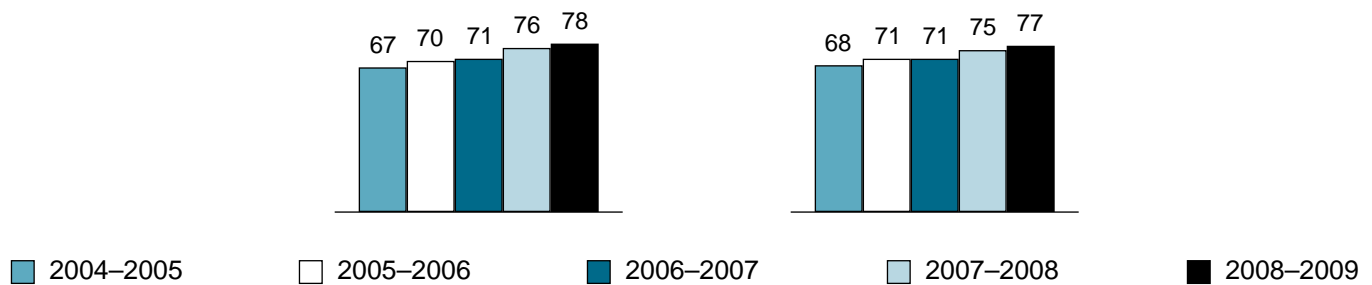
| | Total Number of Students | | | | |
|----------|--------------------------|------------------|------------------|------------------|------------------|
| | <u>2004-2005</u> | <u>2005-2006</u> | <u>2006-2007</u> | <u>2007-2008</u> | <u>2008-2009</u> |
| Board | 2 883 | 2 878 | 2 529 | 2 840 | 2 786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

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

ACADEMIC MATHEMATICS

Board

Province



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

TIPS

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

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



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



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



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



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



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

ABOUT THIS SCHOOL OR BOARD REPORT

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

This report includes

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

Specifically, you will find

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

HOW TO USE THIS REPORT

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

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

Learn more about us at www.eqao.com.

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

Contextual Information

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

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

* See the Explanation of Terms.

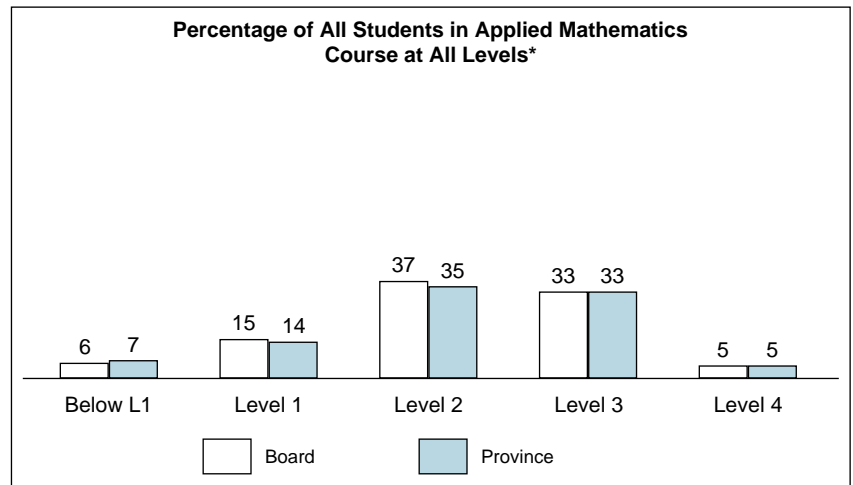
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

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

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

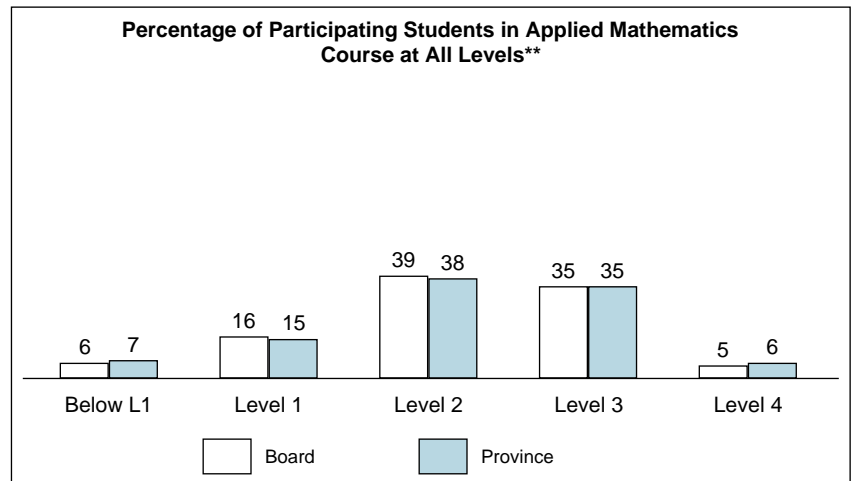
Results for All Students

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



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

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



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

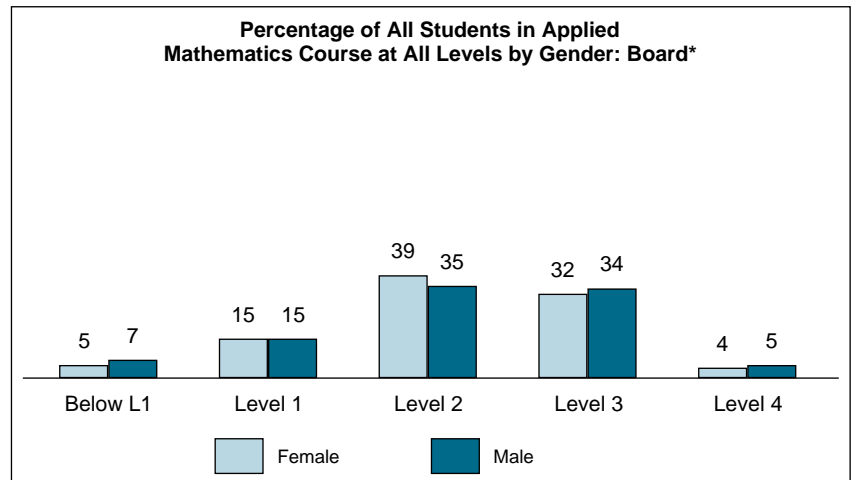
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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

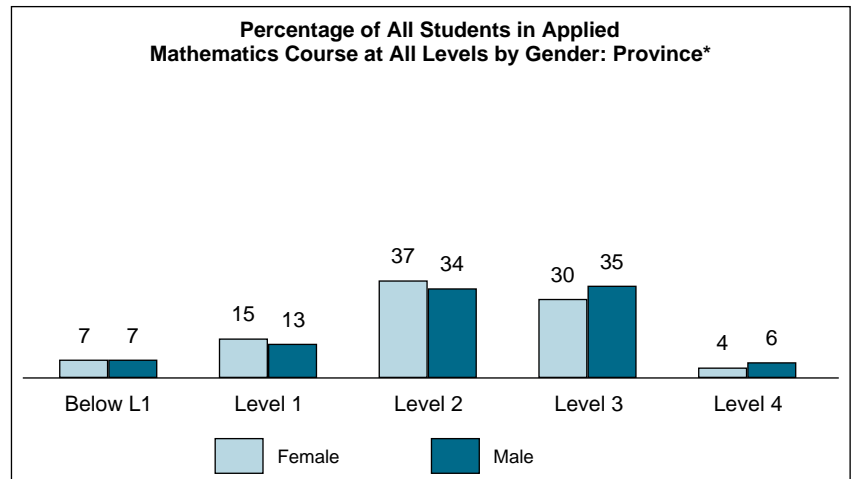
Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

Results by Gender††

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



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



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.
 † These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.
 †† Includes only students for whom gender data were available.

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

Contextual Information

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

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

* See the Explanation of Terms.

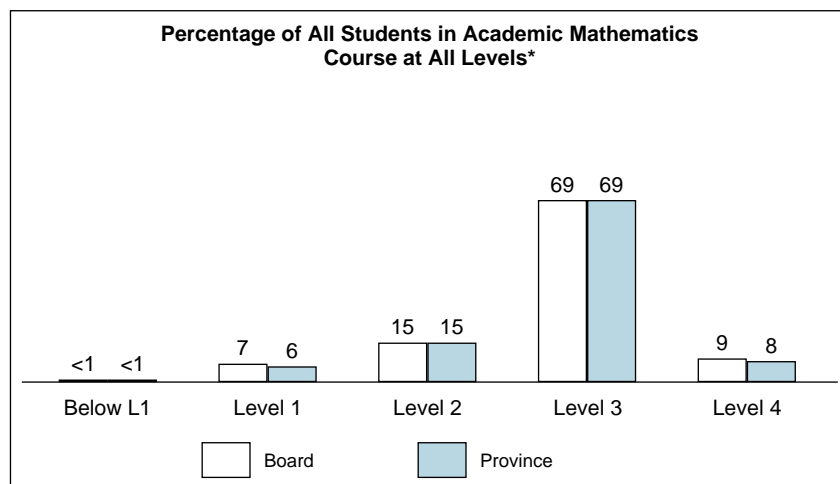
† Contextual data pertaining to "gender" and "student status" are provided by schools and/or boards through the Student Data Collection process. Some data may be missing because they were not provided by the school or the board.

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

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

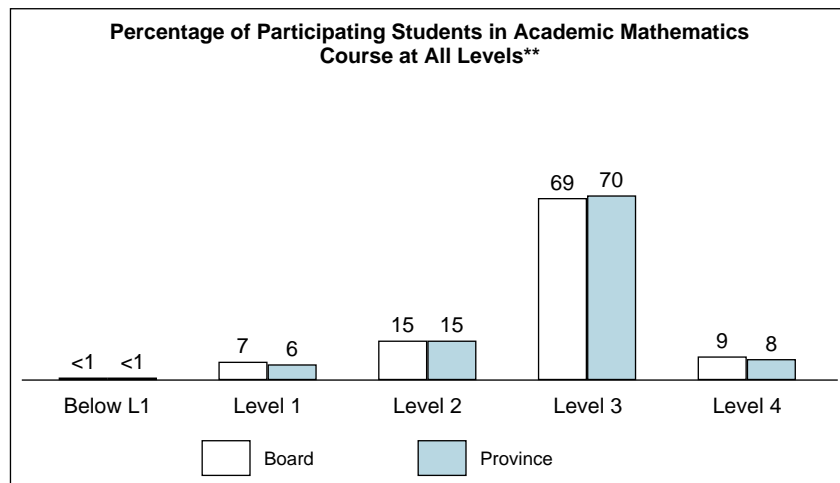
Results for All Students

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



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

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



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

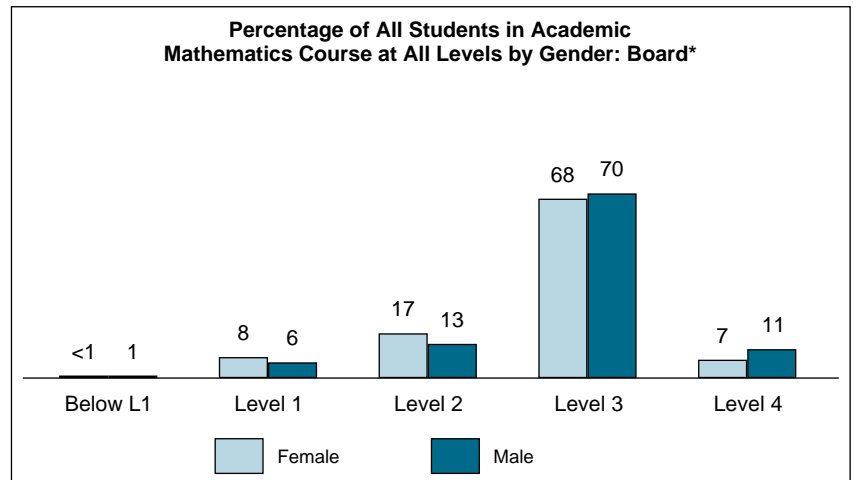
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† These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.

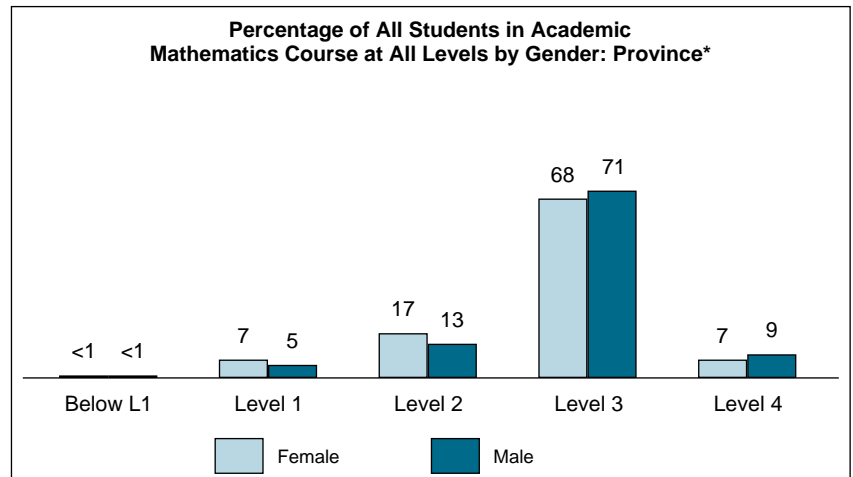
Grade 9 Assessment of Mathematics, 2008–2009, Academic Course

Results by Gender††

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



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



* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.
 † These percentages are based on the actual number of students and cannot be calculated simply by adding the rounded percentages of students at Levels 3 and 4.
 †† Includes only students for whom gender data were available.

Grade 9 Assessment of Mathematics, 2008–2009

Contextual Information over Time: Applied Mathematics Course

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

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

* See the Explanation of Terms.

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

⁺⁺ Beginning in 2006–2007, exemptions have not been permitted.

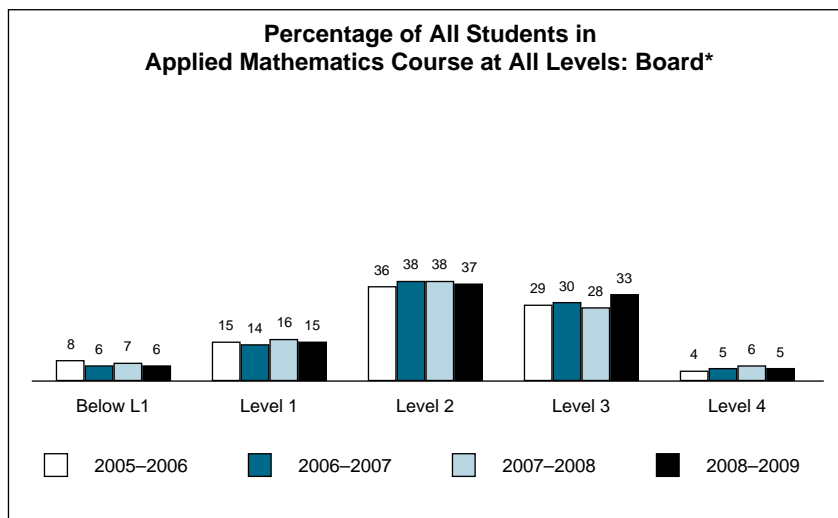
†† Contextual data pertaining to "school background" and "language" are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

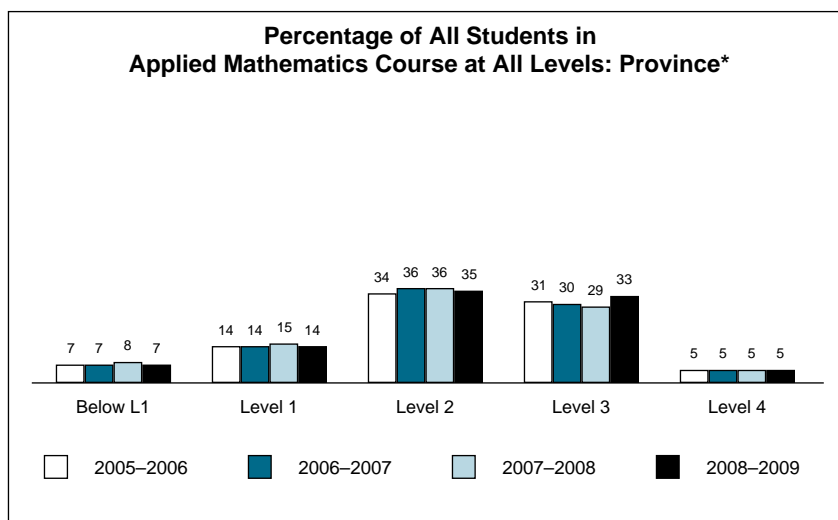
Results over Time, 2005–2006 to 2008–2009

Applied Mathematics Course for All Students**

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



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



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

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

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

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

Grade 9 Assessment of Mathematics, 2008–2009

Contextual Information over Time: Academic Mathematics Course

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

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

* See the Explanation of Terms.

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

** Beginning in 2006–2007, exemptions have not been permitted.

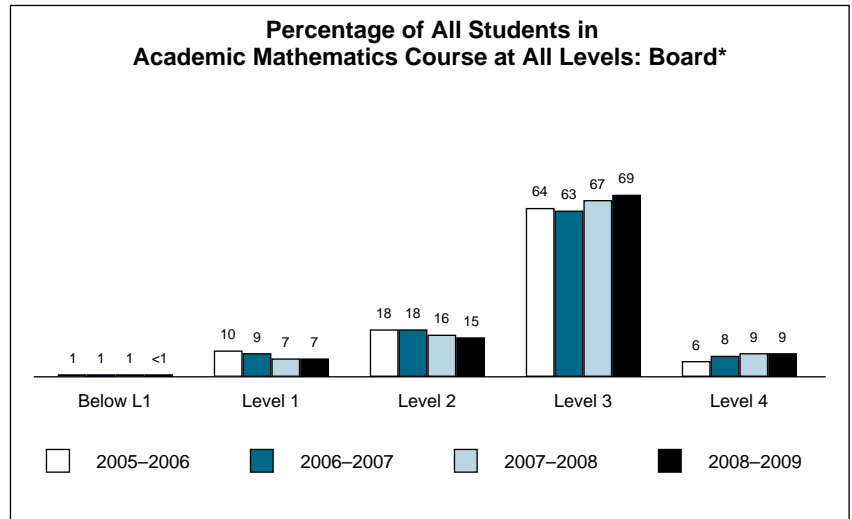
†† Contextual data pertaining to “school background” and “language” are gathered from the Student Questionnaire completed by students. Some data may be missing because they were not provided by the students.

n/a Information not available.

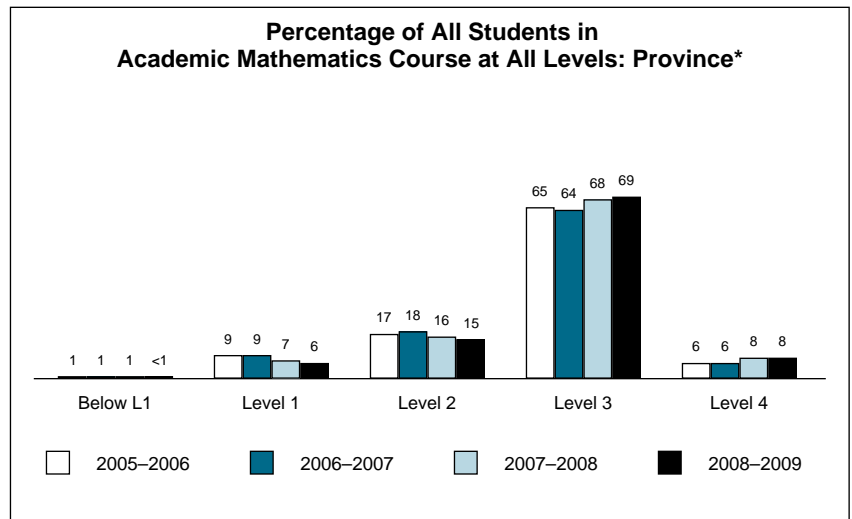
Results over Time, 2005–2006 to 2008–2009

Academic Mathematics Course for All Students

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



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



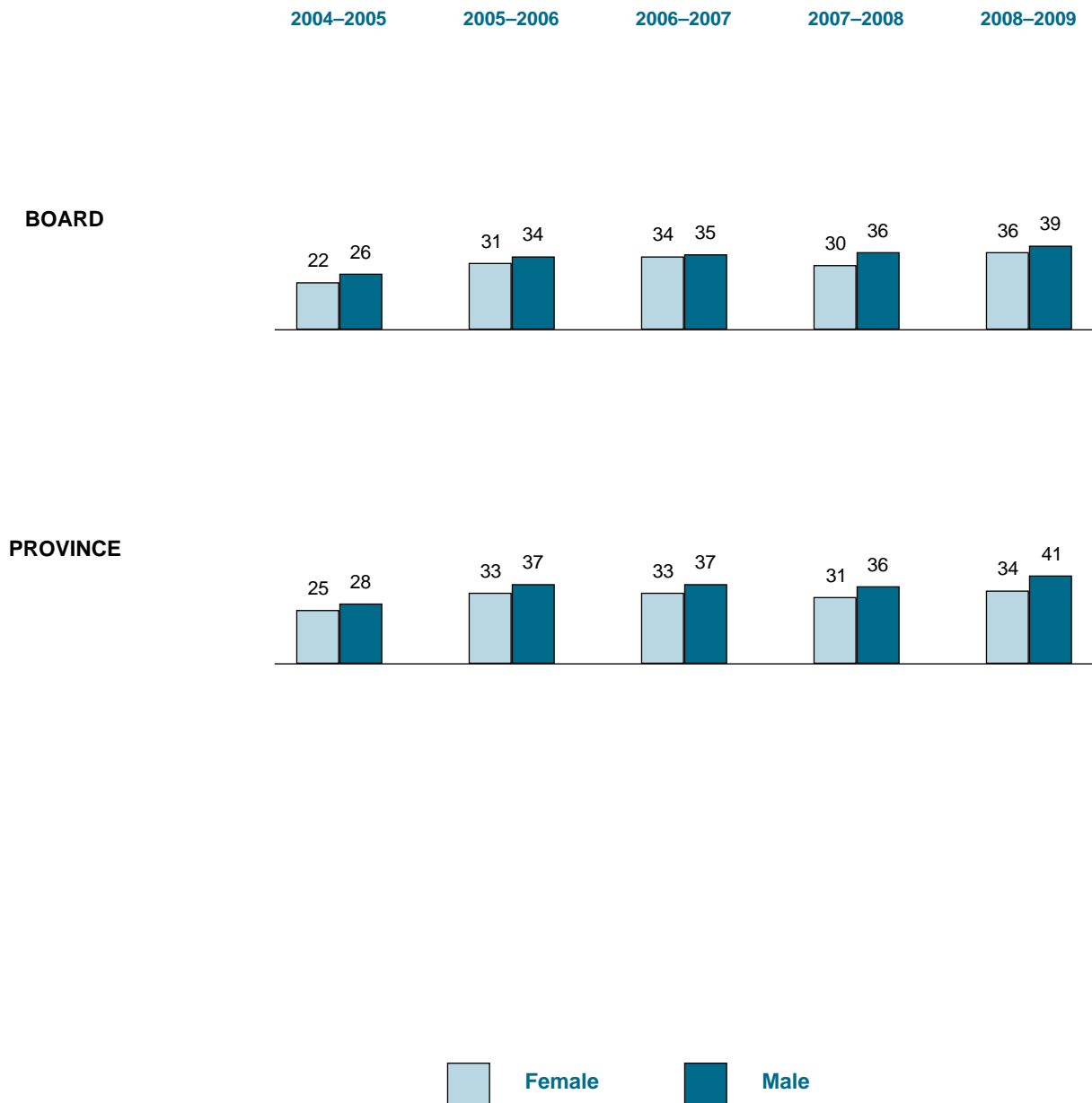
* Because percentages in tables and graphs are rounded, and because graphs do not show all reporting categories, percentages may not add to 100.

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

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

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER†

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



Total Number of Students in Applied Mathematics Course†

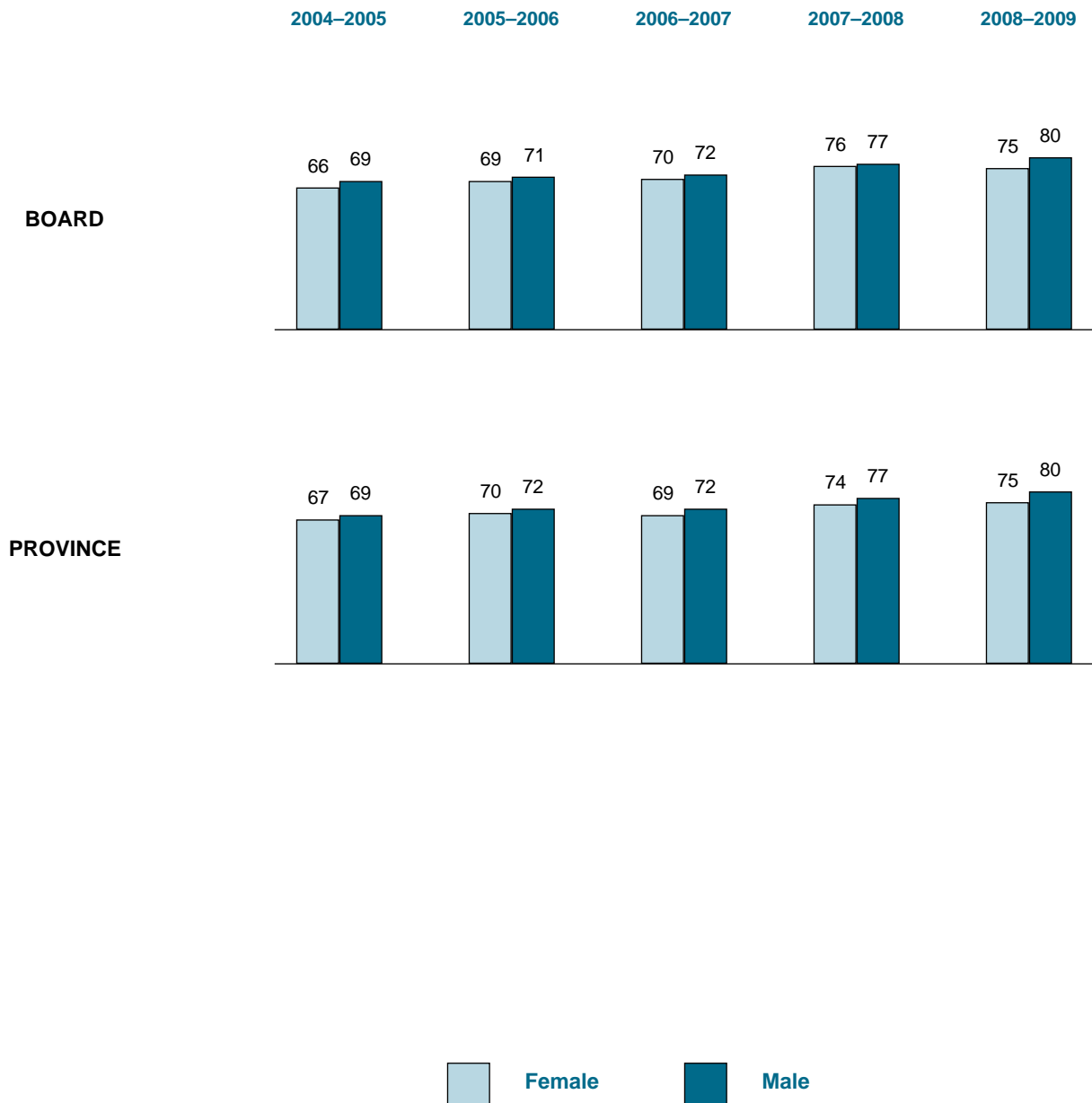
| | 2004-2005 | | 2005-2006 | | 2006-2007 | | 2007-2008 | | 2008-2009 | |
|----------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
| | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| Board | 1 288 | 1 523 |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

† Includes only students for whom gender data were available.

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

RESULTS FOR ALL STUDENTS OVER TIME BY GENDER†

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



Total Number of Students in Academic Mathematics Course†

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

† Includes only students for whom gender data were available.

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

| STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 535) | | | |
|--|-------------------------|--|--|
| Questionnaire Item | Percentage of Students* | | |
| | | | |
| 1. Degree to which students “agree” or “disagree” with each of the following statements: | | | <i>Number of Students Who Answered “Strongly Agree or Agree”</i> |
| I like mathematics. | | | 960 |
| I am good at mathematics. | | | 864 |
| I understand most of the mathematics I am taught. | | | 1 609 |
| The mathematics I learn now is very useful for everyday life. | | | 1 216 |
| I need to keep taking mathematics for the kind of job I want after I leave school. | | | 1 181 |
| Mathematics is boring. | | | 1 059 |
| Mathematics is an easy subject. | | | 483 |
| | | | |
| 2. How “easy” or “hard” students find mathematics questions that deal with the following: | | | <i>Number of Students Who Answered “Very Easy or Easy”</i> |
| number sense (e.g., operations with integers, rational numbers, exponents) | | | 1 215 |
| algebra (e.g., solving equations, simplifying expressions with polynomials) | | | 1 157 |
| linear relations (e.g., scatter plots, lines of best fit) | | | 1 626 |
| measurement (e.g., perimeter, area, volume) | | | 1 685 |
| geometry (e.g., angles, parallel lines, quadrilaterals) | | | 1 030 |
| | | | |

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

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

| STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 2 535) | | |
|---|-------------------------|--|
| Questionnaire Item | Percentage of Students* | |
| | | |
| 3. Students have the following <i>at home</i> to use for mathematics school work: | | Number of Students Who Answered "Yes" |
| a computer | | 1 410 |
| a scientific calculator | | 1 954 |
| a graphing calculator | | 232 |
| <p style="text-align: center;"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </p> | | |
| 4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day: | | Number of Students |
| more than 45 minutes | | 377 |
| between 31 and 45 minutes | | 636 |
| 30 minutes or less | | 1 160 |
| mathematics homework not usually assigned | | 326 |
| 5. How often students complete all of their mathematics homework: | | Number of Students |
| never or seldom | | 386 |
| sometimes | | 813 |
| often or always | | 1 295 |
| 6. How often students have been absent from their Grade 9 mathematics class this year: | | Number of Students |
| never | | 326 |
| one to four times | | 1 193 |
| five to nine times | | 544 |
| 10 or more times | | 430 |

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

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

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

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

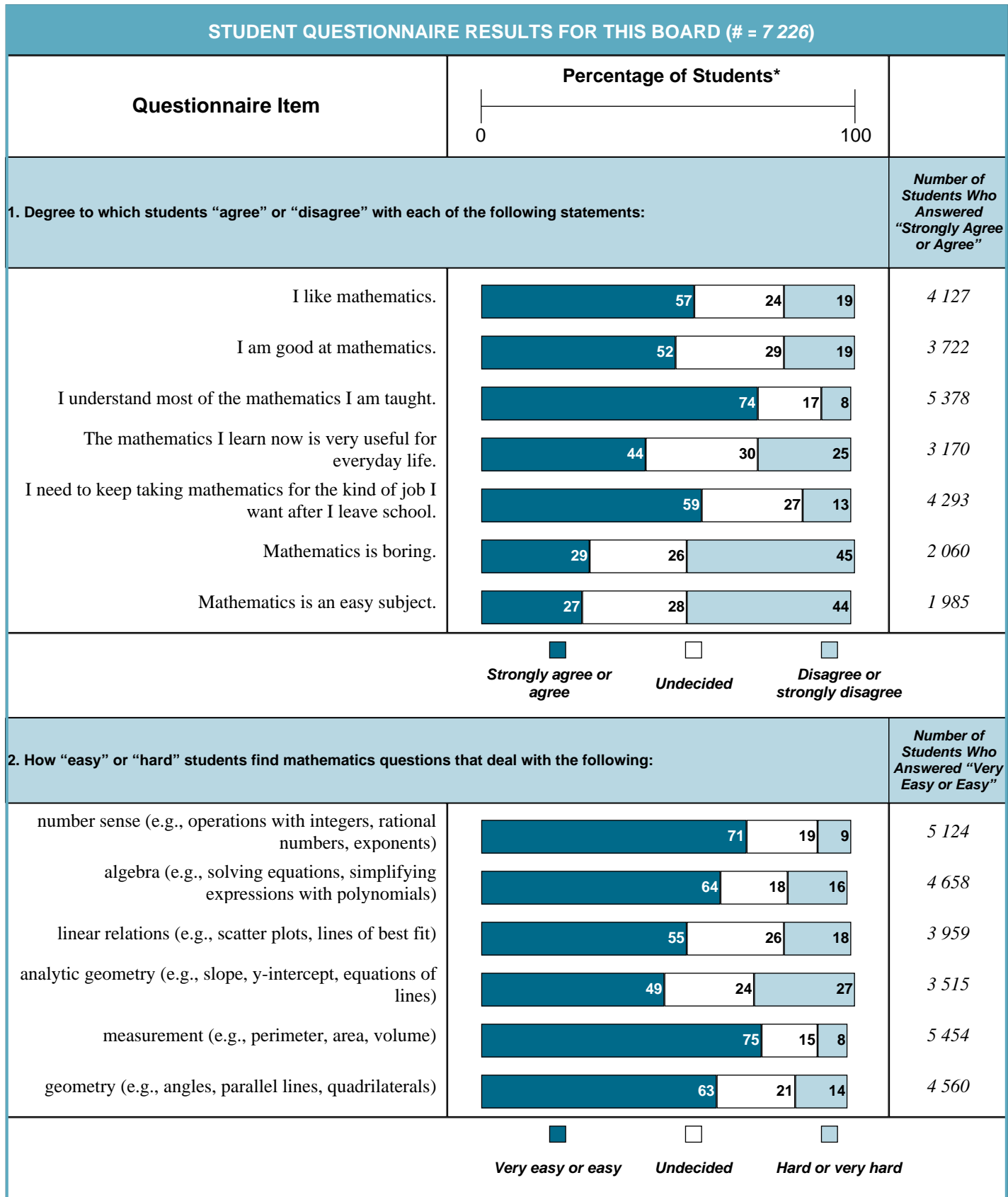
Grade 9 Assessment of Mathematics, 2008–2009, Applied Course

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

* Includes only students for whom gender data were available.

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

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



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

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

| STUDENT QUESTIONNAIRE RESULTS FOR THIS BOARD (# = 7 226) | | |
|--|-------------------------|--|
| Questionnaire Item | Percentage of Students* | |
| | | |
| 3. Students have the following <i>at home</i> to use for mathematics school work: | | Number of Students Who Answered "Yes" |
| a computer | | 4 868 |
| a scientific calculator | | 6 544 |
| a graphing calculator | | 836 |
| | | |
| 4. Amount of time students <i>usually</i> spend on mathematics homework (in or out of school) on any given day: | | Number of Students |
| more than 45 minutes | | 2 108 |
| between 31 and 45 minutes | | 2 669 |
| 30 minutes or less | | 2 244 |
| mathematics homework not usually assigned | | 113 |
| 5. How often students complete all of their mathematics homework: | | Number of Students |
| never or seldom | | 758 |
| sometimes | | 1 610 |
| often or always | | 4 749 |
| 6. How often students have been absent from their Grade 9 mathematics class this year: | | Number of Students |
| never | | 1 362 |
| one to four times | | 4 301 |
| five to nine times | | 1 020 |
| 10 or more times | | 432 |

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

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

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

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

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

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

* Includes only students for whom gender data were available.

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

Grade 9 Assessment of Mathematics, 2008–2009

EXPLANATION OF TERMS

| | |
|--|---|
| All Students | Results are reported for all students in the course. |
| Participating Students | Results are reported only for those students who took part in the assessment (excludes the "no data" category). |
| Provincial Standard | The Ministry of Education, in <i>The Ontario Curriculum, Grades 9 and 10: Mathematics</i> , has set Level 3 as the provincial standard. |
| Level 4 (80–100%) | The student has demonstrated a very high to outstanding level of achievement. Achievement is <i>above</i> the provincial standard. |
| Level 3 (70–79%) | The student has demonstrated a high level of achievement. Achievement is <i>at</i> the provincial standard. |
| Level 2 (60–69%) | The student has demonstrated some of the required knowledge and skills. Achievement is <i>below, but approaching</i> , the provincial standard. |
| Level 1 (50–59%) | The student has demonstrated a passable level of achievement. Achievement is <i>below</i> the provincial standard. |
| Below Level 1/ Below L1 | The student has not demonstrated sufficient achievement of curriculum expectations (below 50%). |
| No Data | Students who did not complete any part of the assessment due to absence or for medical or other reasons. |
| Exempt | Beginning in 2006–2007, exemptions have not been permitted. |
| English Language Learners | Students who have been identified by the school in accordance with <i>English Language Learners: ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12</i> (2007). Prior to 2007, English language learners were called English as a second language (ESL)/English literacy development (ELD) learners. |
| Students Receiving One or More Special Provisions | Students identified by the school as receiving special provisions. Detailed information about special provisions is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> . |
| Students with Special Needs (excluding gifted) | Students who have been formally identified by an Identification, Placement and Review Committee, as well as students who have an Individual Education Plan. Students identified as gifted are not included. |
| Students Receiving One or More Accommodations | Students identified by the school as receiving accommodations. Students identified as gifted are not included. Detailed information about accommodations is available in EQAO's <i>Guide for Accommodations and Special Provisions</i> . |
| N/R | "Not reported" indicates that the number of students participating (fewer than 15 in a group) or responding to the Student Questionnaire is so small (fewer than six in a group) that identification of individual student results might be possible; therefore, results are not reported. |
| N/D | "No data available" is used to indicate that there were no students in the course for the years specified. |
| W | Results for some or all students are being withheld by EQAO. For further information, please contact personnel at the board. |