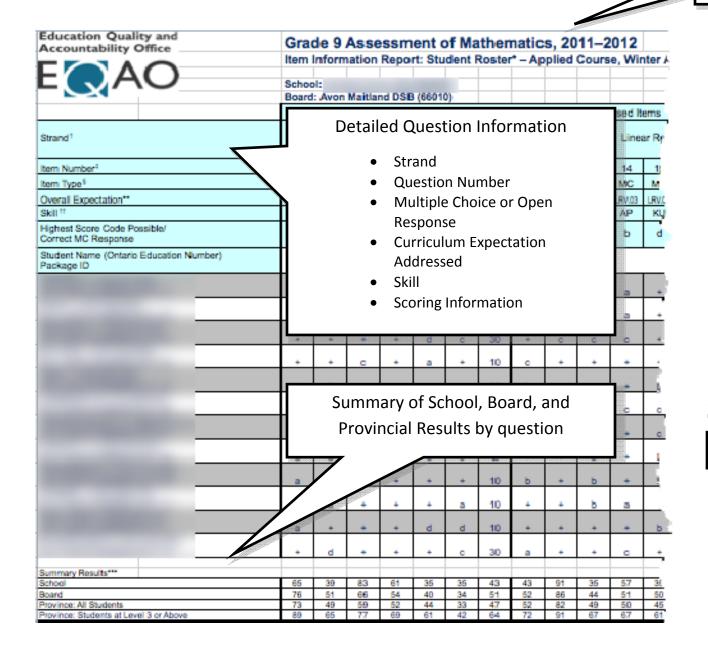
EQAO IIR Reports Grade 9 Mathematics A Guide for Administrators

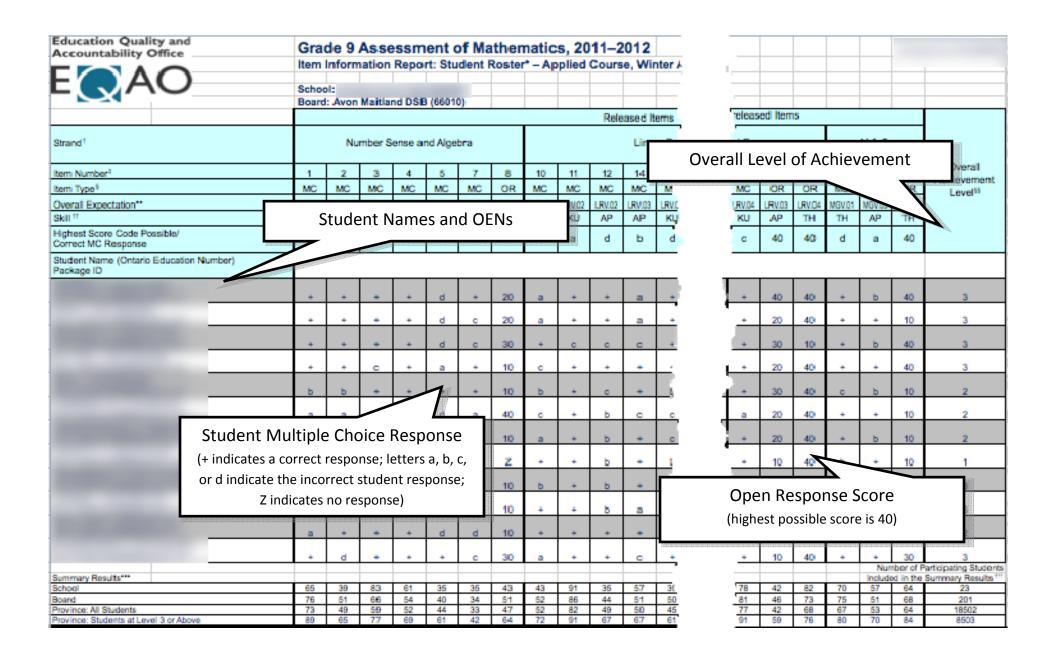


EQAO Report Title

(Grade, Level of Study, Date of Administration)



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| | cicas | ou non | Б | _ | | | | |
| | LR | | | | M & G | | | |
| | 43 | 45 | 46 | 47 | 48 | 49 | Overall | |
| | MC | OR | OR | MC | MC | OR | Achievement Level ⁵⁵ | |
| | LRV.04 | LEV.03 | LRV.04 | MGV.01 | MGV.03 | MBV.02 | Level | |
| | KU | ΑP | TH | TH | AP | TH | | |
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| | + | 10 | 40 | + | + | 30 | \bigvee_{3} | |
| | | | | | Nun | nber of P | Participating Students Summary Results *** | |
| | 78 | 42 | 82 | 70 | 57 | 64 | 23 | |
| | 81 | 46 | 73 | 75 | 51 | 68 | 201 | |
| | 77 | 42 | 68 | 67 | 53 | 64 | 18502 | |
| | 91 | 59 | 76 | 80 | 70 | 84 | 8503 | |



Item Information Report (IIR)

What this report shows:

This report provides a complete record of responses and scores for each question for all students who participated in the assessment. It also includes each student's overall achievement level as reported on the Individual Student Report.

The "Summary Results" at the bottom of the report show the percentage of students in the school, board and province who answered each multiple-choice item correctly. The Open Response results are calculated differently. For these questions, the summary shows the average percentage of total points students received for each open-response item.

The purpose of this report:

The report is designed to deepen educators' understanding about how students performed on the EQAO assessments. By examining variations in student performance by item, educators will see which items were challenging for students in their school or board, and which items were answered at a consistently high level. This information can help schools and boards in the school improvement planning process to focus their efforts to improve instruction and better serve the needs of all students.

| Education Quality and Accountability Office | | | | | | | | | s, 20 | | | | | | | | |
|---|--------------------------|---------|--------|--------|---------|--------|-------|-------|-------|-------|---------|----------|-------|-------|----------|---------|------|
| | Item | Inform | nation | Repo | rt: Stu | dent | Roste | - Ap | plied | Cours | e, Wir | nter A | ssess | ment | | | |
| - (A() | School | | | | | | | | | | | | | | | | = |
| | | | Maitia | nd DSF | 1/6601 | 0) | | | | | | | | | | - | + |
| | Board | . Avon | marcia | nu Dat | 10001 | v) | | | | Rele | ased It | ems | _ | _ | _ | _ | |
| Strand ¹ | Number Sense and Algebra | | | | | | | | | | | ar Relai | tions | | | | , |
| tem Number ¹ | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 10 | 11 | 12 | 14 | 15 | 16 | 17 | 18 | 21 | 2 |
| tem Type ⁵ | MC | MC | MC | MC | MC | MC | OR | MC | MC | MC | MC | MC | MC | MC | MC | OR | 2.0 |
| Overal Expectation** | NAV 01 | NAME OF | NAV 01 | NW/01 | NAV/02 | NAV 02 | NAV01 | LRV01 | LRV02 | LRV02 | LRV03 | LRV03 | LRV03 | LRV04 | LRV04 | LRV01 | MO |
| Skil" | KU | TH | TH | AP | KU | AP | TH | AP | KU | AP. | AP | KU | TH | TH | AP | AP | A |
| Highest Score Code Possible/ Correct MC Response | С | С | d | a | С | ь | 40 | d | а | d | ь | d | С | С | d | 40 | 1 |
| Student Name (Ontario Education Number) Package IO | | | | | | | | | | | | | | Stud | dent Res | sponse/ | Scon |
| | | | | | d | | 20 | a | | | 0 | ٠ | 2 | | | 40 | |
| | | | | | d | c | 20 | a | | | a | | a | | | 30 | L |
| | | 4 | | | d | c | 30 | ¥ | o | c | c | | | | c | 40 | |
| | | | c | | a | | 10 | o | | | | | | | | 40 | L |
| | ь | ь | | | | | 10 | 6 | | c | | ь | a | d | a | 40 | |
| | a | a | | | d | a | 40 | с | | b | с | c | a | b | a | 40 | L |
| | d | b | | c | | a | 10 | 3 | * | ь | * | С | 3 | ь | c | 20 | H |
| | a | a | a | ь | d | с | Z | | ٠ | ь | ٠ | ь | ď | b | b | 30 | L |
| _ | 3 | a | ٠ | | | ٠ | 10 | b | + | 5 | | b | 3 | d | + | 40 | F |
| | a | a | | ٠ | ٠ | a | 10 | | | ь | a | | b | b | a | 40 | H |
| _ | a | | | ٠ | d | d | 10 | | ٠ | | | 5 | 3 | d | c | 10 | H |
| | | d | ٠ | ٠ | | С | 30 | a | ٠ | | С | ٠ | | d | | 40 | ۲ |
| lummary Results*** | 65 | 39 | 83 | 61 | 35 | 35 | 43 | 43 | 91 | 36 | 57 | 39 | 26 | 26 | 57 | 75 | 1 |
| Board | 76 | 51 | 66 | 54 | 40 | 34 | 51 | 52 | 86 | 44 | 51 | 50 | 40 | 31 | 57 | 74 | 7 |
| Province: All Students | 73 | 49 | 59 | 52 | 44 | 33 | 47 | 52 | 82 | 49 | 50 | 45 | 42 | 28 | 55 | 66 | - 61 |

Detailed Question Information – Grade 9 Applied Mathematics

Released Items/Unreleased Items

EQAO only releases publicly some of the questions used on the assessment. All questions are scored.

Strand

• The strand shows the broad curriculum area or strand that is assessed (e.g. NS & A = Number Sense and Algebra, LR = Linear Relations, M & G = Measurement and Geometry).

Item Number

Question number in each section

Item Type

Questions are either Multiple Choice (MC) or Open Response (OR).

Overall Expectations

• Refer to pages 15–31 of the *Framework: Grade 9 Assessment of Mathematics* for a list of the overall expectations (e.g. NAV.01 Solve problems involving proportional reasoning).

Skill

• The categories of knowledge and skills are described as follows: KU = Knowledge and Understanding; AP = Application; TH = Thinking.

Highest Score Code Possible/Correct MC Response

- The highest possible score for Open Response is 40. The other possible scores are b, I, 10, 20, and 30.
- The correct response to each Multiple Choice question is provided.

| | | | | | | | | | | Rele | 35 |
|---|--------|--------|--------|---------|---------|--------|--------|--------|--------|--------|----|
| Strand ¹ | | Nu | mber S | ense ar | nd Alge | bra | | | | | |
| Item Number ¹ | | 2 | 3 | 4 | 5 | 7 | 8 | 10 | 11 | 12 | |
| Item Type ⁵ | MC | MC | MC | MC | MC | MC | OR | MC | MC | MC | |
| Overall Expectation** | NW/.01 | NAV.01 | NAV.01 | NAV.01 | NW/.02 | NW/.02 | NW/.01 | LRV.01 | LRV.02 | LRV.02 | B. |
| Skill ^{††} | KU | TH | TH | AP | KU | AP | TH | AP | KU | AP | |
| Highest Score Code Possible/ Correct MC Response | | С | d | a | С | ۵ | 40 | d | a | d | |

| | U | nreleas | ed Item | 5 | | | | |
|--------|--------|---------|---------|-------|--------|--------|--------|------------------------------------|
| | | LR | | | | M & G | | |
| 39 | 42 | 43 | 45 | 46 | 47 | 48 | 49 | Overall |
| MC | MC | MC | OR | OR | MC | MC | OR | Achievement Level ⁵⁵ |
| LRV.02 | LRV.04 | LRV:04 | URV.03 | URV04 | MGV.01 | MGV:03 | MGV/02 | |
| AP | TH | KU | AP | TH | TH | AP | TH | |
| a | C | o | 40 | 40 | d | a | 40 | |

Detailed Question Information – Grade 9 Academic Mathematics

Released Items/Unreleased Items

• EQAO only releases publicly some of the questions used on the assessment. All questions are scored.

Strand

• The strand shows the broad curriculum area or strand that is assessed (e.g. NS & A = Number Sense and Algebra, LR = Linear Relations, AG = Analytic Geometry, M & G = Measurement and Geometry).

Item Number

Question number in each section

Item Type

Questions are either Multiple Choice (MC) or Open Response (OR).

Overall Expectations

• Refer to pages 15–31 of the *Framework: Grade 9 Assessment of Mathematics* for a list of the overall expectations (e.g. NAV.01 Solve problems involving proportional reasoning).

Skill

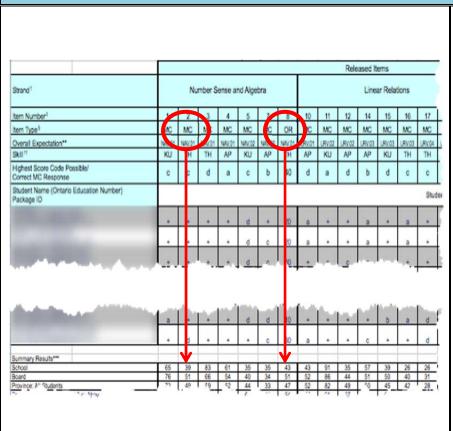
• The categories of knowledge and skills are described as follows: KU = Knowledge and Understanding; AP = Application; TH = Thinking.

Highest Score Code Possible/Correct MC Response

- The highest possible score for Open Response is 40. The other possible scores are b, I, 10, 20, and 30.
- The correct response to each Multiple Choice question is provided.

| | | | | | | | | | | - | Relea |
|---|--------|--------|---------|---------|--------|--------|--------|----------|--------|--------|-------|
| Strand ¹ | Nu | mber S | ense ar | nd Alge | bra | | Lines | ar Relat | ions | | 3 |
| Item Number ² | 1 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 14 | 3 |
| Item Type ⁵ | MC | MC | MC | MC | OR | MC | MC | MC | MC | OR | M |
| Overall Expectation** | NAV.01 | NW/.02 | NW/.02 | NW/.02 | NW/.02 | LRV.01 | LRV.02 | LRV.02 | LRV.03 | LRV.03 | AGN |
| Skill ¹¹ | KU | AP | KU | TH | AP | Ħ | TH | AP | KU | TH | -1, |
| Highest Score Code Possible/ Correct MC Response | đ | đ | a | Ь | 40 | o | ۵ | a | đ | 40 | c |

| | LR | | | AG | | М 8 | k G | |
|--------|----------|--------|--------|--------|--------|--------|--------|------------------------|
| 35 | 35 36 38 | | 41 | 41 43 | | 47 | 50 | Overall Achievement |
| MC | | | MC MC | | OR | MC | OR | Levelis |
| LRV.02 | LRV.03 | LRV.02 | AGV.02 | AGV:03 | AGV.02 | MGV:03 | MGV.03 | |
| KU | AP | AP | AP. | AP | AP | 짇 | TH | |
| d | a | 40 | ۵ | Ь | 40 | υ | 40 | |



Summary Results : All Levels of Study

Summary Results for the School, Board, and Province: All Students

For Multiple Choice (MC) items, the Summary Results indicate the percentage of students who answered correctly.

For Open Response (OR) items, the Summary Results indicates the average percentage of total points students received for the item.

e.g. if the maximum score is 40, and the average (mean) score for a class of students was 20, the Summary Result for that item expressed as a percentage would be 50.

Summary Results for Province: Students at Level 3 or Above

This summary is calculated in the manner indicated above, but using only students whose Overall Score achieved or surpassed the Provincial standard.

Using Results for School Improvement Planning

Summary Results for the School, Board, and Province: All Students

An analysis of results in Mathematics for both Applied and Academic levels of study should be completed by the school team. The discussions that take place during this time will provide valuable insight into student learning. The summary results are used to determine which areas of the assessment were challenging for students, as well as to highlight areas of strength. In the highlighted examples, there were significant differences in how students in this school performed when compared to the Board and Province.

| Summary Results ^{‡‡} | | | | | | | |
|--|----|----|----|----|----|----|----|
| School | 67 | 67 | 78 | 58 | 65 | 39 | 6 |
| Board | 69 | 80 | 73 | 61 | 70 | 49 | 6 |
| Province: All Students | 68 | 80 | 75 | 60 | 73 | 50 | 71 |
| Province: Students at Level 3 or Above | 81 | 92 | 84 | 68 | 82 | 59 | 8 |

To determine why students in this school had difficulty with this question, the school team may consider questions such as:

Did many students respond with the same incorrect answer? Which expectation was this question addressing? What was the format of the question? Did the question have multiple steps? Is this an area that students struggled with during classroom instruction?

This analysis, in combination with other assessment information, may be used for improvement planning and targeting specific areas of need for the students who participated in the assessment. The information can be used to drive instruction in the intermediate division as well as in future grade 9 math classes.

