

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

About Your School

<i>Number of Respondents</i>	Province*	
	#	%†
f. There is co-operation at this school among teachers.		
Strongly disagree or disagree	31	3%
Neither agree nor disagree	92	8%
Agree or strongly agree	1 076	89%
No response/ambiguous response	9	1%
g. There is co-operation at this school among all staff members.		
Strongly disagree or disagree	81	7%
Neither agree nor disagree	182	15%
Agree or strongly agree	933	77%
No response/ambiguous response	12	1%
h. There is co-operation at this school between students and teachers.		
Strongly disagree or disagree	22	2%
Neither agree nor disagree	151	12%
Agree or strongly agree	1 025	85%
No response/ambiguous response	10	1%
i. There is co-operation at this school between teachers and parents or guardians.		
Strongly disagree or disagree	72	6%
Neither agree nor disagree	250	21%
Agree or strongly agree	872	72%
No response/ambiguous response	14	1%
j. There is respect for diversity (e.g., cultural, ethnic, special needs) at this school.		
Strongly disagree or disagree	30	2%
Neither agree nor disagree	102	8%
Agree or strongly agree	1 066	88%
No response/ambiguous response	10	1%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

About Your School

<i>Number of Respondents</i>	Province*	
	#	%†
4. This question is not reported. Currently under field-testing.		

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Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

About Your School

<i>Number of Respondents</i>	Province*	
	#	%†
5a. For which mathematics course are you answering questions 5 to 12?‡		
Grade 9 applied	1 208	100%
Grade 9 academic	0	0%
No response/ambiguous response	0	0%
5b. This course is offered over		
a semester.	1 113	92%
a year.	82	7%
No response/ambiguous response	13	1%

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† Percentages may not add up to 100, due to rounding.

‡ Respondents were asked to select only one option.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Resources

<i>Number of Respondents</i>	Province*	
	#	%
6. How have you used the EQAO sample student assessments and scoring guides this semester or year?†		
<u>Independently</u>		
a. To show samples of student responses to students	913	76%
b. To help students understand how questions and tasks relate to curriculum expectations	891	74%
c. To communicate with parents and guardians about curriculum expectations	391	32%
d. As a model for designing assessments	843	70%
e. To inform classroom instruction	923	76%
f. In ways other than those listed above	339	28%
g. Did not use	52	4%
<u>With a school team</u>		
h. As a model for designing assessments	433	36%
i. To inform classroom instruction	411	34%
j. In ways other than those listed above	159	13%
k. Did not use	33	3%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Respondents were able to select all options that applied.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Resources

<i>Number of Respondents</i>	Province*	
	#	%
7. How have you used EQAO data (demographic data, assessment and questionnaire results) this semester or year?†		
<u>Independently</u>		
a. To identify how well students are meeting curriculum expectations	450	37%
b. To communicate with parents and guardians about student achievement	247	20%
c. To learn more about students at the school (e.g., attitudes, activities outside school)	311	26%
d. To identify areas of strength and areas for improvement in Grade 9 mathematics instructional programs	499	41%
e. To inform planning of your Grade 9 mathematics instructional programs	564	47%
f. To guide school improvement initiatives for mathematics	299	25%
g. In ways other than those listed above	141	12%
h. Did not use	171	14%
<u>With a school team</u>		
i. To identify how well students are meeting curriculum expectations	619	51%
j. To communicate with parents and guardians about student achievement	196	16%
k. To learn more about students at the school (e.g., attitudes, activities outside school)	380	31%
l. To identify areas of strength and areas for improvement in Grade 9 mathematics instructional programs	627	52%
m. To inform planning of your Grade 9 mathematics instructional programs	537	44%
n. To guide school improvement initiatives for mathematics	606	50%
o. In ways other than those listed above	114	9%
p. Did not use	73	6%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Respondents were able to select all options that applied.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of Instructional Resources in Your Classroom

<i>Number of Respondents</i>	Province*	
	#	%†
8. I. How often did you have the majority of your students use each of the following in class this semester or year?		
a. Calculator		
Never	0	0%
Seldom	8	1%
Sometimes	81	7%
Frequently	1 097	91%
No response/ambiguous response	22	2%
b. Graphing calculator		
Never	605	50%
Seldom	293	24%
Sometimes	194	16%
Frequently	78	6%
No response/ambiguous response	38	3%
c. Computer software (e.g., spreadsheet, statistical, dynamic geometry or graphing software)		
Never	236	20%
Seldom	396	33%
Sometimes	412	34%
Frequently	140	12%
No response/ambiguous response	24	2%
d. The Internet (e.g., to access statistics or other sources of mathematical information)		
Never	149	12%
Seldom	375	31%
Sometimes	438	36%
Frequently	220	18%
No response/ambiguous response	26	2%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of Instructional Resources in Your Classroom

<i>Number of Respondents</i>	Province*	
	#	%†
e. Concrete manipulative (e.g., geoboard, algebra tiles, connecting cubes)		
Never	103	9%
Seldom	363	30%
Sometimes	522	43%
Frequently	199	16%
No response/ambiguous response	21	2%
f. Measuring device (e.g., ruler, metre stick, protractor)		
Never	22	2%
Seldom	174	14%
Sometimes	528	44%
Frequently	463	38%
No response/ambiguous response	21	2%
g. Presentation technology (e.g., interactive white board, LCD projector)		
Never	51	4%
Seldom	72	6%
Sometimes	150	12%
Frequently	913	76%
No response/ambiguous response	22	2%

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Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of Instructional Resources in Your Classroom

<i>Number of Respondents</i>	Province*	
	#	%†
8. II. How accessible were each of the following for use in class this semester or year?		
a. Calculator		
Not accessible	4	<1%
Difficult to access	43	4%
Easy to access	1 097	91%
No response/ambiguous response	64	5%
b. Graphing calculator		
Not accessible	124	10%
Difficult to access	190	16%
Easy to access	785	65%
No response/ambiguous response	109	9%
c. Computer software (e.g., spreadsheet, statistical, dynamic geometry or graphing software)		
Not accessible	37	3%
Difficult to access	259	21%
Easy to access	828	69%
No response/ambiguous response	84	7%
d. The Internet (e.g., to access statistics or other sources of mathematical information)		
Not accessible	14	1%
Difficult to access	111	9%
Easy to access	1 008	83%
No response/ambiguous response	75	6%
e. Concrete manipulative (e.g., geoboard, algebra tiles, connecting cubes)		
Not accessible	19	2%
Difficult to access	130	11%
Easy to access	981	81%
No response/ambiguous response	78	6%

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Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of Instructional Resources in Your Classroom

<i>Number of Respondents</i>	Province*	
	#	%†
f. Measuring device (e.g., ruler, metre stick, protractor)		
Not accessible	4	<1%
Difficult to access	48	4%
Easy to access	1 092	90%
No response/ambiguous response	64	5%
g. Presentation technology (e.g., interactive white board, LCD projector)		
Not accessible	16	1%
Difficult to access	56	5%
Easy to access	1 067	88%
No response/ambiguous response	69	6%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Some Teaching Practices

<i>Number of Respondents</i>	Province*	
	#	%†
9. How often did you ask your students to do each of the following during mathematics class this semester or year?		
a. Discuss and use problem-solving strategies for finding answers (e.g., work backward, use a chart, make a model)		
Never	4	<1%
Seldom	43	4%
Sometimes	399	33%
Frequently	736	61%
No response/ambiguous response	26	2%
b. Solve open-ended problems		
Never	11	1%
Seldom	120	10%
Sometimes	526	44%
Frequently	525	43%
No response/ambiguous response	26	2%
c. Work collaboratively to solve problems		
Never	5	<1%
Seldom	61	5%
Sometimes	367	30%
Frequently	749	62%
No response/ambiguous response	26	2%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Some Teaching Practices

<i>Number of Respondents</i>	Province*	
	#	%†
d. Discuss mathematical ideas and relationships		
Never	2	<1%
Seldom	60	5%
Sometimes	351	29%
Frequently	766	63%
No response/ambiguous response	29	2%
e. Conduct mathematical investigations (e.g., to demonstrate the inquiry process)		
Never	21	2%
Seldom	226	19%
Sometimes	580	48%
Frequently	353	29%
No response/ambiguous response	28	2%
f. Explain the reasoning behind their answers		
Never	2	<1%
Seldom	18	1%
Sometimes	252	21%
Frequently	909	75%
No response/ambiguous response	27	2%
g. Write solutions using mathematical language and symbols		
Never	0	0%
Seldom	10	1%
Sometimes	133	11%
Frequently	1 037	86%
No response/ambiguous response	28	2%

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Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Some Teaching Practices

<i>Number of Respondents</i>	Province*	
	#	%†
10a. How often did you assign homework in your mathematics course this semester or year?		
Never	103	9%
Occasionally	444	37%
Most classes	375	31%
Every class	255	21%
No response/ambiguous response	31	3%
10b. If you assign homework, how much time would you expect an average student to spend on a typical homework assignment?‡		
30 minutes or less	839	78%
Between 31 and 45 minutes	205	19%
More than 45 minutes	13	1%
No response/ambiguous response	17	2%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

‡ Numbers and percentages are based on the number of teachers who answered “Occasionally,” “Most classes” or “Every class” to Question 10a.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Parental Engagement in Student Learning

<i>Number of Respondents</i>	Province*	
	#	%†
11. About what percentage of parents and guardians would you say you have contact with over a full school year through the following means?		
a. School-wide parent-teacher meetings		
0–10%	284	24%
11–25%	459	38%
26–50%	316	26%
More than 50%	99	8%
No response/ambiguous response	50	4%
b. Meetings requested by you or the parents or guardians		
0–10%	708	59%
11–25%	308	25%
26–50%	102	8%
More than 50%	37	3%
No response/ambiguous response	53	4%
c. Telephone		
0–10%	351	29%
11–25%	388	32%
26–50%	268	22%
More than 50%	154	13%
No response/ambiguous response	47	4%
d. E-mail or Web site (class or school)		
0–10%	335	28%
11–25%	301	25%
26–50%	211	17%
More than 50%	307	25%
No response/ambiguous response	54	4%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Parental Engagement in Student Learning

<i>Number of Respondents</i>	Province*	
	#	%†
e. Other means		
0–10%	440	36%
11–25%	46	4%
26–50%	33	3%
More than 50%	66	5%
No response/ambiguous response	623	52%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Parental Engagement in Student Learning

<i>Number of Respondents</i>	Province*	
	#	%†
12. About what percentage of parents and guardians would you say you have contact with over a full school year for the following reasons?		
a. To discuss the link between EQAO assessments and <i>The Ontario Curriculum</i>		
0%	691	57%
1–10%	298	25%
11–25%	67	6%
26–50%	41	3%
More than 50%	56	5%
No response/ambiguous response	55	5%
b. To discuss the link between EQAO assessments and instructional or assessment strategies		
0%	625	52%
1–10%	325	27%
11–25%	90	7%
26–50%	51	4%
More than 50%	56	5%
No response/ambiguous response	61	5%
c. To discuss their child's learning progress		
0%	13	1%
1–10%	153	13%
11–25%	296	25%
26–50%	329	27%
More than 50%	372	31%
No response/ambiguous response	45	4%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Parental Engagement in Student Learning

<i>Number of Respondents</i>	Province*	
	#	%†
d. To discuss their child's behaviour		
0%	60	5%
1–10%	400	33%
11–25%	333	28%
26–50%	221	18%
More than 50%	146	12%
No response/ambiguous response	48	4%
e. To provide suggestions about how to support learning at home		
0%	57	5%
1–10%	323	27%
11–25%	339	28%
26–50%	263	22%
More than 50%	179	15%
No response/ambiguous response	47	4%
f. For other reasons		
0%	203	17%
1–10%	261	22%
11–25%	110	9%
26–50%	82	7%
More than 50%	84	7%
No response/ambiguous response	468	39%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Background and Professional Development

<i>Number of Respondents</i>	Province*	
	#	%†
13. Including this year, for how many years have you been teaching?		
a. In total		
2 years or less	44	4%
3–5 years	129	11%
6–10 years	244	20%
11 years or more	756	63%
No response/ambiguous response	35	3%
b. Mathematics at the secondary level		
2 years or less	144	12%
3–5 years	156	13%
6–10 years	245	20%
11 years or more	622	51%
No response/ambiguous response	41	3%
c. Grade 9 mathematics		
2 years or less	231	19%
3–5 years	216	18%
6–10 years	253	21%
11 years or more	466	39%
No response/ambiguous response	42	3%

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† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Background and Professional Development

<i>Number of Respondents</i>	Province*	
	#	%†
14. What best describes your area of study during your post-secondary education?‡		
Mathematics major or specialist	450	37%
Mathematics-related major or specialist (e.g., business, science, engineering, computer science)	391	32%
Other major with a mathematics minor	140	12%
Other major with a mathematics-related minor	59	5%
Area of study unrelated to mathematics	133	11%
No response/ambiguous response	35	3%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

‡ Respondents were asked to select only one option.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Background and Professional Development

<i>Number of Respondents</i>	Province*	
	#	%
15. Which of the following courses have you completed or are you presently enrolled in?†		
Intermediate Additional Basic Qualifications in Mathematics	462	38%
Senior Additional Basic Qualifications in Mathematics	424	35%
Honour Specialist Additional Qualifications in Mathematics	340	28%
Additional Qualifications in Integration of Information and Computer Technology in Instruction	73	6%
Additional Qualifications in English as a Second Language	115	10%
Additional Qualifications in Special Education	426	35%
None of the above	176	15%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Respondents were able to select all options that applied.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Background and Professional Development

<i>Number of Respondents</i>	Province*	
	#	%†
16. In the past two years, have you participated in professional development activities (e.g., courses, workshops, conferences, PLCs) related to any of the following topics?		
a. Mathematics pedagogy or instruction		
Yes	1 056	87%
No	120	10%
No response/ambiguous response	32	3%
b. Integration of information and computer technology into mathematics instruction		
Yes	847	70%
No	320	26%
No response/ambiguous response	41	3%
c. Developing students' critical thinking or problem-solving skills in mathematics		
Yes	955	79%
No	215	18%
No response/ambiguous response	38	3%
d. Instructional strategies for differentiated instruction (in any subject)		
Yes	915	76%
No	246	20%
No response/ambiguous response	47	4%
e. Teaching students with special needs		
Yes	608	50%
No	527	44%
No response/ambiguous response	73	6%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Assessment in Students' Marks

<i>Number of Respondents</i>	Province*	
	#	%†
17a. Do you count some or all components of the Grade 9 Assessment of Mathematics as part of your students' class marks?		
Yes	1 148	95%
No	33	3%
No response/ambiguous response	27	2%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

† Percentages may not add up to 100, due to rounding.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Assessment in Students' Marks

<i>Number of Respondents</i>	Province*	
	#	%†
17b. If yes, for how much do they count?‡		
1–5%	226	20%
6–10%	534	47%
11–15%	240	21%
16–20%	60	5%
21–25%	10	1%
26–30%	41	4%
Other	12	1%
No response/ambiguous response	25	2%
18. Before writing the Grade 9 Assessment of Mathematics, were students informed about the weight it would be given in the calculation of their class mark (e.g., 5%, 10%)?‡		
Yes	1 133	99%
No	14	1%
No response/ambiguous response	1	<1%
19. In your opinion, does counting some or all components of the Grade 9 Assessment of Mathematics as part of class marks motivate students to take the assessment more seriously?‡		
Yes	981	85%
No	52	5%
Undecided	110	10%
No response/ambiguous response	5	<1%

* Numbers and percentages for this section apply to Questions 17b-22.

† Percentages may not add up to 100, due to rounding.

‡ Numbers and percentages are based on the number of teachers who answered "yes" to Question 17a.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Assessment in Students' Marks

<i>Number of Respondents</i>	Province*	
	#	%
20. Who decides if some or all components of the Grade 9 Assessment of Mathematics count as part of your students' class marks?^{†‡}		
School-board staff	313	27%
Mathematics department	747	65%
School principal or vice-principal	214	19%
Individual Grade 9 mathematics teachers	193	17%
Grade 9 mathematics teachers as a group	384	33%
Don't know	48	4%
Other	6	1%
21. Who decides which questions count as part of your students' class marks?^{†‡}		
School-board staff	111	10%
Mathematics department	551	48%
School principal or vice-principal	74	6%
Individual Grade 9 mathematics teachers	325	28%
Grade 9 mathematics teachers as a group	473	41%
Don't know	33	3%
Other	5	<1%

* Numbers and percentages for this section apply to Questions 17b-22.

† Numbers and percentages are based on the number of teachers who answered "yes" to Question 17a.

‡ Respondents were able to select all options that applied.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Assessment in Students' Marks

<i>Number of Respondents</i>	Province*	
	#	%†
22. Which types of questions count as part of your students' class marks?‡		
a. Open-response questions		
All questions	514	45%
Some questions	441	38%
No questions	144	13%
No response/ambiguous response	49	4%
b. Multiple-choice questions		
All questions	921	80%
Some questions	194	17%
No questions	17	1%
No response/ambiguous response	16	1%

* Numbers and percentages for this section apply to Questions 17b-22.

† Percentages may not add up to 100, due to rounding.

‡ Numbers and percentages are based on the number of teachers who answered "yes" to Question 17a.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Use of EQAO Assessment in Students' Marks

<i>Number of Respondents</i>	Province*	
	#	%†
23. Which strands count as part of your students' class marks?‡		
a. Number Sense and Algebra		
b. Linear Relations		
All questions		30%
No questions		0%
c. Measurement and Geometry		
All questions		29%
No questions		0%
d. Analytic Geometry (academic only)		
This question is not applicable to the applied course.		

* Numbers and percentages for this section apply to Question 23.

† Percentages may not add up to 100, due to rounding.

‡ Numbers and percentages are based on the number of teachers who answered "yes" to Question 17a, less those who answered "all questions" for 22a and 22b.

Grade 9 Assessment of Mathematics, 2018–2019

Teacher Questionnaire: Applied Course

Other

<i>Number of Respondents</i>	Province*	
	#	%†
24. Do you believe that the time allotted this year to complete the Grade 9 Assessment of Mathematics was sufficient?		
Yes	1 095	91%
No	56	5%
No response/ambiguous response	57	5%
25. I would prefer to answer this questionnaire online (through the Internet).		
Strongly disagree or disagree	295	24%
Neither agree nor disagree	364	30%
Agree or strongly agree	506	42%
No response/ambiguous response	43	4%

* Numbers and percentages are based on the total number of teachers who completed the questionnaire.

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