Education Quality and Accountability Office



# Grade 9 Assessment of Mathematics, 2018–2019

## **Teacher Questionnaire: Applied Course**

#### **Provincial Results**

#### **About Your School**

	Pro	/ince <sup>*</sup>
Number of Respondents	1 208	
	#	%₀†
1. How often did you meet with other staff members at your school for the following reasons this semester or year?		
a. To discuss general school issues		
Never or hardly ever	25	2%
A few times	149	12%
Once a month	508	42%
Once every 2 weeks	135	11%
At least once a week	382	32%
No response/ambiguous response	9	1%
b. To reflect on school-level data (e.g., EQAO, diagnostic tests) for planning purposes		
Never or hardly ever	127	11%
A few times	658	54%
Once a month	251	21%
Once every 2 weeks	82	7%
At least once a week	78	6%
No response/ambiguous response	12	1%
c. To participate in school-based professional learning activities (e.g., PLCs, school growth teams)		
Never or hardly ever	75	6%
A few times	461	38%
Once a month	540	45%
Once every 2 weeks	69	6%
At least once a week	50	4%
No response/ambiguous response	13	1%

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince*
Number of Respondents	1 208	
	#	<b>%</b> †
d. To reflect on the delivery of the mathematics curriculum (e.g., to plan lessons, discuss instructional strategies and materials)		
Never or hardly ever	82	7%
A few times	358	30%
Once a month	194	16%
Once every 2 weeks	172	14%
At least once a week	392	32%
No response/ambiguous response	10	1%
e. To coordinate mathematics instruction among teachers		
Never or hardly ever	105	9%
A few times	322	27%
Once a month	171	14%
Once every 2 weeks	149	12%
At least once a week	444	37%
No response/ambiguous response	17	1%

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince*
Number of Respondents	1 208	
	#	⁰∕₀†
2. To what extent do you agree or disagree with the following statements about your school's improvement goals in mathematics this year?		
a. The school's improvement goals have been communicated to me.		
Strongly disagree or disagree	62	5%
Neither agree nor disagree	132	11%
Agree or strongly agree	1 000	83%
No response/ambiguous response	14	1%
b. The school's improvement goals were clear to me.		
Strongly disagree or disagree	72	6%
Neither agree nor disagree	173	14%
Agree or strongly agree	950	79%
No response/ambiguous response	13	1%
c. I had the support of other staff members at the school to help me work toward the improvement goals.		
Strongly disagree or disagree	55	5%
Neither agree nor disagree	183	15%
Agree or strongly agree	955	79%
No response/ambiguous response	15	1%
d. The school provided me with materials to help me work toward the improvement goals.		
Strongly disagree or disagree	97	8%
Neither agree nor disagree	228	19%
Agree or strongly agree	869	72%
No response/ambiguous response	14	1%

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince*
Number of Respondents	1 208	
	#	<b>%</b> †
e. The school has taken steps to meet its improvement goals.		
Strongly disagree or disagree	46	4%
Neither agree nor disagree	214	18%
Agree or strongly agree	932	77%
No response/ambiguous response	16	1%
f. I had the opportunity to participate in decisions about the school's improvement goals.		
Strongly disagree or disagree	147	12%
Neither agree nor disagree	264	22%
Agree or strongly agree	782	65%
No response/ambiguous response	15	1%

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince*
Number of Respondents	12	208
	#	<b>%</b> †
3. To what extent do you agree or disagree with the following statements about your school?		
a. Students take pride in this school.		
Strongly disagree or disagree	74	6%
Neither agree nor disagree	235	19%
Agree or strongly agree	891	74%
No response/ambiguous response	8	1%
b. Teachers take pride in this school.		
Strongly disagree or disagree	20	2%
Neither agree nor disagree	113	9%
Agree or strongly agree	1 068	88%
No response/ambiguous response	7	1%
c. There is strong school spirit in this school.		
Strongly disagree or disagree	144	12%
Neither agree nor disagree	313	26%
Agree or strongly agree	742	61%
No response/ambiguous response	9	1%
d. Students at this school respect one another.		
Strongly disagree or disagree	58	5%
Neither agree nor disagree	256	21%
Agree or strongly agree	885	73%
No response/ambiguous response	9	1%
e. There is co-operation at this school among students.		
Strongly disagree or disagree	39	3%
Neither agree nor disagree	183	15%
Agree or strongly agree	977	81%
No response/ambiguous response	9	1%

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince*
Number of Respondents	1 208	
	#	%₀†
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%

<sup>\*</sup> Numbers and percentages are based on the total number of teachers who completed the questionnaire.

### **Teacher Questionnaire: Applied Course**

**About Your School** 

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

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

### **Teacher Questionnaire: Applied Course**

#### **About Your School**

	Prov	vince <sup>*</sup>
Number of Respondents	1 208	
	#	%₀†
5a. For which mathematics course are you answering questions 5 to 12? <sup>‡</sup>		
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%

\* 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.

### **Teacher Questionnaire: Applied Course**

#### **Use of EQAO Resources**

	Prov	vince*
Number of Respondents	1 208	
	#	%
6. How have you used the EQAO sample student assessments and scoring guides this semester or year? <sup><math>\dagger</math></sup>		
<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%
With a school team		
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.

### **Teacher Questionnaire: Applied Course**

#### **Use of EQAO Resources**

	Prov	vince <sup>*</sup>
Number of Respondents	12	208
	#	%
7. How have you used EQAO data (demographic data, assessment and		
questionnaire results) this semester or year? $^\dagger$		
<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%
With a school team		
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%
<ol> <li>To identify areas of strength and areas for improvement in Grade 9 mathematics instructional programs</li> </ol>	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.

### **Teacher Questionnaire: Applied Course**

	Prov	vince*
Number of Respondents	1 208	
	#	<b>%</b> †
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%

#### Use of Instructional Resources in Your Classroom

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

### **Teacher Questionnaire: Applied Course**

	Prov	/ince <sup>*</sup>	
Number of Respondents	1	1 208	
	#	%†	
e. Concrete manipulative (e.g., geoboard, algebra tiles, connecting cubes)		I	
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%	

#### Use of Instructional Resources in Your Classroom

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

### **Teacher Questionnaire: Applied Course**

	Prov	vince*
Number of Respondents	1 2	208
	#	%†
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%

#### **Use of Instructional Resources in Your Classroom**

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

### **Teacher Questionnaire: Applied Course**

#### Use of Instructional Resources in Your Classroom

	Prov	vince <sup>*</sup>
Number of Respondents	12	208
	#	<b>%</b> †
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%

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

### **Teacher Questionnaire: Applied Course**

#### **Some Teaching Practices**

	Prov	vince <sup>*</sup>
Number of Respondents	1 208	
	#	%†
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%

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

### **Teacher Questionnaire: Applied Course**

#### **Some Teaching Practices**

	Prov	vince*
Number of Respondents	1	208
	#	%₀†
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%

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

### **Teacher Questionnaire: Applied Course**

#### **Some Teaching Practices**

	Prov	vince*
Number of Respondents	12	208
	#	<b>%</b> †
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? $\ddagger$		
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%

<sup>\*</sup> Numbers and percentages are based on the total number of teachers who completed the questionnaire.

<sup>†</sup> Percentages may not add up to 100, due to rounding.

<sup>\*</sup> Numbers and percentages are based on the number of teachers who answered "Occasionally," "Most classes" or "Every class" to Question 10a.

### **Teacher Questionnaire: Applied Course**

#### Parental Engagement in Student Learning

	Prov	ince <sup>*</sup>
Number of Respondents	1 2	208
	#	<b>%</b> †
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%

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

### **Teacher Questionnaire: Applied Course**

#### Parental Engagement in Student Learning

	Province <sup>*</sup>	
Number of Respondents	1 208	
	#	<b>%</b> †
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%

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

### **Teacher Questionnaire: Applied Course**

#### Parental Engagement in Student Learning

		Prov	vince <sup>*</sup>
	Number of Respondents	12	208
		#	<b>%</b> †
12. About what percentage of parents you have contact with over a full school			
a. To discuss the link between EQAO a <i>Curriculum</i>	assessments and <i>The Ontario</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 assessment strategies	assessments and instructional or		
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 pro	gress		
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%

<sup>\*</sup> Numbers and percentages are based on the total number of teachers who completed the questionnaire.

### **Teacher Questionnaire: Applied Course**

#### Parental Engagement in Student Learning

		Prov	ince*
	Number of Respondents	Respondents 1 208	
		#	<b>%</b> †
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	o 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.

#### **Teacher Questionnaire: Applied Course**

#### **Province**\* Number of Respondents 1 208 # %† 13. Including this year, for how many years have you been teaching? a. In total 2 years or less 44 4% 129 3-5 years 11% 6-10 years 244 20% 756 63% 11 years or more No response/ambiguous response 35 3% b. Mathematics at the secondary level 144 12% 2 years or less 3-5 years 156 13% 6-10 years 245 20% 622 51% 11 years or more 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%

#### **Background and Professional Development**

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

### **Teacher Questionnaire: Applied Course**

#### **Background and Professional Development**

	Prov	vince <sup>*</sup>
Number of Respondents	1 208	
	#	<b>%</b> †
14. What best describes your area of study during your post-secondary education? <sup>‡</sup>		
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.

### **Teacher Questionnaire: Applied Course**

#### **Background and Professional Development**

	Prov	vince*
Number of Respondents	1 208	
	#	%
15. Which of the following courses have you completed or are you presently enrolled in? <sup>†</sup>		
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.

### **Teacher Questionnaire: Applied Course**

#### **Background and Professional Development**

	Prov	vince*
Number of Respondents	12	208
	#	%†
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.

### **Teacher Questionnaire: Applied Course**

#### Use of EQAO Assessment in Students' Marks

	Province*	
Number of Respondents	1 208	
	#	%†
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.

### **Teacher Questionnaire: Applied Course**

	Prov	/ince <sup>*</sup>
Number of Respondents	1 148	
	#	⁰∕₀†
17b. If yes, for how much do they count? <sup>‡</sup>		
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%)? <sup>‡</sup>		
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? <sup>‡</sup>		
Yes	981	85%
No	52	5%
Undecided	110	10%
No response/ambiguous response	5	<1%

#### Use of EQAO Assessment in Students' Marks

<sup>\*</sup> Numbers and percentages for this section apply to Questions 17b-22.

<sup>†</sup> Percentages may not add up to 100, due to rounding.

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

### **Teacher Questionnaire: Applied Course**

#### Use of EQAO Assessment in Students' Marks

	Prov	vince*
Number of Respondents	1	148
	#	%
20. Who decides if some or all components of the Grade 9 Assessment of Mathematics count as part of your students' class marks? <sup>†‡</sup>		
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? $^{\dagger \ddagger}$		
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 are based on the number of teachers who answered "yes" to Question 17a.

<sup>\*</sup> Numbers and percentages for this section apply to Questions 17b-22.

<sup>‡</sup> Respondents were able to select all options that applied.

### **Teacher Questionnaire: Applied Course**

#### Use of EQAO Assessment in Students' Marks

	Province*	
Number of Respondents	1 148	
	#	<b>%</b> †
22. Which types of questions count as part of your students' class marks? <sup>‡</sup>		
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%

<sup>\*</sup> Numbers and percentages for this section apply to Questions 17b-22.

<sup>†</sup> Percentages may not add up to 100, due to rounding.

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

### **Teacher Questionnaire: Applied Course**

#### Use of EQAO Assessment in Students' Marks

	Prov	vince*
Number of Respondents	6	51
	#	<b>%</b> †
23. Which strands count as part of your students' class marks? <sup>‡</sup>		
a. Number Sense and Algebra		
All questions	189	29%
Some questions	394	61%
No questions	0	0%
No response/ambiguous response	68	10%
b. Linear Relations		
All questions	194	30%
Some questions	389	60%
No questions	0	0%
No response/ambiguous response	68	10%
c. Measurement and Geometry		
All questions	189	29%
Some questions	395	61%
No questions	0	0%
No response/ambiguous response	67	10%
d. Analytic Geometry (academic only)		·
This question is not applicable to the applied course.		

<sup>\*</sup> Numbers and percentages for this section apply to Question 23.

<sup>†</sup> Percentages may not add up to 100, due to rounding.

<sup>\*</sup> 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.

### **Teacher Questionnaire: Applied Course**

#### Other

	Province*	
Number of Respondents	1 208	
	#	<b>%</b> †
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%

<sup>\*</sup> Numbers and percentages are based on the total number of teachers who completed the questionnaire.

<sup>†</sup> Percentages may not add up to 100, due to rounding.