Education Quality and Accountability Office

E AO Grade 9 Assessment of Mathematics, 2017–2018

# **Teacher Questionnaire: Applied Course**

#### **Provincial Results**

#### **About Your School**

	Province*	
Number of Respondents	1 275	
	#	%†
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	20	2%
A few times	147	12%
Once a month	514	40%
Once every 2 weeks	154	12%
At least once a week	433	34%
No response/ambiguous response	7	1%
b. To reflect on school-level data (e.g., EQAO, diagnostic tests) for planning purposes		
Never or hardly ever	119	9%
A few times	701	55%
Once a month	260	20%
Once every 2 weeks	105	8%
At least once a week	80	6%
No response/ambiguous response	10	1%
c. To participate in school-based professional learning activities (e.g., PLCs, school growth teams)		
Never or hardly ever	61	5%
A few times	486	38%
Once a month	537	42%
Once every 2 weeks	125	10%
At least once a week	54	4%
No response/ambiguous response	12	1%

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

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

#### **About Your School**

	Province <sup>*</sup>		
Number of Respondents	1	1 275	
	#	%†	
d. To reflect on the delivery of the mathematics curriculum (e.g., to plan lessons, discuss instructional strategies and materials)			
Never or hardly ever	72	6%	
A few times	345	27%	
Once a month	229	18%	
Once every 2 weeks	171	13%	
At least once a week	446	35%	
No response/ambiguous response	12	1%	
e. To coordinate mathematics instruction among teachers			
Never or hardly ever	115	9%	
A few times	295	23%	
Once a month	185	15%	
Once every 2 weeks	194	15%	
At least once a week	474	37%	
No response/ambiguous response	12	1%	

\* 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	1 275	
	#	%†
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	65	5%
Neither agree nor disagree	123	10%
Agree or strongly agree	1 076	84%
No response/ambiguous response	11	1%
b. The school's improvement goals were clear to me.		
Strongly disagree or disagree	79	6%
Neither agree nor disagree	174	14%
Agree or strongly agree	1 009	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	62	5%
Neither agree nor disagree	191	15%
Agree or strongly agree	1 008	79%
No response/ambiguous response	14	1%
d. The school provided me with materials to help me work toward the improvement goals.		
Strongly disagree or disagree	86	7%
Neither agree nor disagree	256	20%
Agree or strongly agree	918	72%
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	/ince <sup>*</sup>
Number of Respondents	1 275	
	#	%₀†
e. The school has taken steps to meet its improvement goals.		
Strongly disagree or disagree	48	4%
Neither agree nor disagree	217	17%
Agree or strongly agree	994	78%
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	172	13%
Neither agree nor disagree	279	22%
Agree or strongly agree	812	64%
No response/ambiguous response	12	1%

\* 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	1 275	
	#	%₀†
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	106	8%
Neither agree nor disagree	237	19%
Agree or strongly agree	926	73%
No response/ambiguous response	6	<1%
b. Teachers take pride in this school.		
Strongly disagree or disagree	44	3%
Neither agree nor disagree	126	10%
Agree or strongly agree	1 100	86%
No response/ambiguous response	5	<1%
c. There is strong school spirit in this school.		
Strongly disagree or disagree	179	14%
Neither agree nor disagree	325	25%
Agree or strongly agree	763	60%
No response/ambiguous response	8	1%
d. Students at this school respect one another.		
Strongly disagree or disagree	73	6%
Neither agree nor disagree	290	23%
Agree or strongly agree	903	71%
No response/ambiguous response	9	1%
e. There is co-operation at this school among students.		
Strongly disagree or disagree	40	3%
Neither agree nor disagree	213	17%
Agree or strongly agree	1 016	80%
No response/ambiguous response	6	<1%

\* 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	1 275	
	#	⁰∕₀†
f. There is co-operation at this school among teachers.		
Strongly disagree or disagree	38	3%
Neither agree nor disagree	121	9%
Agree or strongly agree	1 111	87%
No response/ambiguous response	5	<1%
g. There is co-operation at this school among all staff members.		
Strongly disagree or disagree	99	8%
Neither agree nor disagree	210	16%
Agree or strongly agree	948	74%
No response/ambiguous response	18	1%
h. There is co-operation at this school between students and teachers.		
Strongly disagree or disagree	24	2%
Neither agree nor disagree	146	11%
Agree or strongly agree	1 092	86%
No response/ambiguous response	13	1%
i. There is co-operation at this school between teachers and parents or guardians.		
Strongly disagree or disagree	57	4%
Neither agree nor disagree	298	23%
Agree or strongly agree	910	71%
No response/ambiguous response	10	1%
j. There is respect for diversity (e.g., cultural, ethnic, special needs) at this school.		
Strongly disagree or disagree	25	2%
Neither agree nor disagree	106	8%
Agree or strongly agree	1 138	89%
No response/ambiguous response	6	<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 <sup>*</sup>	
Number of Respondents		
	#	%₁
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	/ince <sup>*</sup>
Number of Respondents	1 275	
	#	%₀†
5a. For which mathematics course are you answering questions 5 to 12? <sup>‡</sup>		
Grade 9 applied	1 275	100%
Grade 9 academic	0	0%
No response/ambiguous response	0	0%
5b. This course is offered over		
a semester.	1 188	93%
a year.	73	6%
No response/ambiguous response	14	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**

	Province*	
Number of Respondents	1 275	
	#	%
6. How have you used the EQAO sample student assessments and		
scoring guides this semester or year? $^{\dagger}$		
<u>Independently</u>		
a. To show samples of student responses to students	965	76%
b. To help students understand how questions and tasks relate to curriculum expectations	904	71%
c. To communicate with parents and guardians about curriculum expectations	384	30%
d. As a model for designing assessments	924	72%
e. To inform classroom instruction	965	76%
f. In ways other than those listed above	381	30%
g. Did not use	45	4%
With a school team		
h. As a model for designing assessments	459	36%
i. To inform classroom instruction	477	37%
j. In ways other than those listed above	177	14%
k. Did not use	29	2%

\* 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**

	Province*		
Number of Respondents	1	1 275	
	#	%	
7. How have you used EQAO data (demographic data, assessment and			
questionnaire results) this semester or year? <sup>†</sup>			
<b>Independently</b>			
a. To identify how well students are meeting curriculum expectations	470	37%	
b. To communicate with parents and guardians about student achievement	245	19%	
c. To learn more about students at the school (e.g., attitudes, activities outside school)	322	25%	
d. To identify areas of strength and areas for improvement in Grade 9 mathematics instructional programs	544	43%	
e. To inform planning of your Grade 9 mathematics instructional programs	589	46%	
f. To guide school improvement initiatives for mathematics	363	28%	
g. In ways other than those listed above	117	9%	
h. Did not use	166	13%	
With a school team			
i. To identify how well students are meeting curriculum expectations	688	54%	
j. To communicate with parents and guardians about student achievement	208	16%	
k. To learn more about students at the school (e.g., attitudes, activities outside school)	410	32%	
1. To identify areas of strength and areas for improvement in Grade 9 mathematics instructional programs	712	56%	
m. To inform planning of your Grade 9 mathematics instructional programs	614	48%	
n. To guide school improvement initiatives for mathematics	679	53%	
o. In ways other than those listed above	101	8%	
p. Did not use	63	5%	

\* 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**

	Province* 1 275	
Number of Respondents		
	#	⁰∕₀†
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	3	<1%
Seldom	11	1%
Sometimes	103	8%
Frequently	1 142	90%
No response/ambiguous response	16	1%
b. Graphing calculator		
Never	613	48%
Seldom	338	27%
Sometimes	211	17%
Frequently	76	6%
No response/ambiguous response	37	3%
c. Computer software (e.g., spreadsheet, statistical, dynamic geometry or graphing software)		
Never	252	20%
Seldom	428	34%
Sometimes	450	35%
Frequently	125	10%
No response/ambiguous response	20	2%
d. The Internet (e.g., to access statistics or other sources of mathematical information)		
Never	181	14%
Seldom	406	32%
Sometimes	461	36%
Frequently	206	16%
No response/ambiguous response	21	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	Province*	
Number of Respondents	1	1 275	
	#	%₀†	
e. Concrete manipulative (e.g., geoboard, algebra tiles, connecting cubes)			
Never	108	8%	
Seldom	356	28%	
Sometimes	544	43%	
Frequently	245	19%	
No response/ambiguous response	22	2%	
f. Measuring device (e.g., ruler, metre stick, protractor)			
Never	12	1%	
Seldom	194	15%	
Sometimes	573	45%	
Frequently	474	37%	
No response/ambiguous response	22	2%	
g. Presentation technology (e.g., interactive white board, LCD projector)			
Never	73	6%	
Seldom	68	5%	
Sometimes	171	13%	
Frequently	945	74%	
No response/ambiguous response	18	1%	

#### 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**

	Province*	
Number of Respondents	1 275	
	#	%†
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	54	4%
Easy to access	1 139	89%
No response/ambiguous response	78	6%
b. Graphing calculator		
Not accessible	104	8%
Difficult to access	208	16%
Easy to access	859	67%
No response/ambiguous response	104	8%
c. Computer software (e.g., spreadsheet, statistical, dynamic geometry or graphing software)		
Not accessible	40	3%
Difficult to access	256	20%
Easy to access	886	69%
No response/ambiguous response	93	7%
d. The Internet (e.g., to access statistics or other sources of mathematical information)		
Not accessible	15	1%
Difficult to access	110	9%
Easy to access	1 059	83%
No response/ambiguous response	91	7%
e. Concrete manipulative (e.g., geoboard, algebra tiles, connecting cubes)		
Not accessible	26	2%
Difficult to access	130	10%
Easy to access	1 035	81%
No response/ambiguous response	84	7%

#### 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

	Province*	
Number of Respondents	1 275	
	#	%₀†
f. Measuring device (e.g., ruler, metre stick, protractor)		
Not accessible	4	<1%
Difficult to access	42	3%
Easy to access	1 147	90%
No response/ambiguous response	82	6%
g. Presentation technology (e.g., interactive white board, LCD projector)		
Not accessible	27	2%
Difficult to access	55	4%
Easy to access	1 106	87%
No response/ambiguous response	87	7%

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

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

#### **Some Teaching Practices**

	Province*	
Number of Respondents	1 275	
	#	%†
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	11	1%
Seldom	56	4%
Sometimes	420	33%
Frequently	767	60%
No response/ambiguous response	21	2%
b. Solve open-ended problems		
Never	11	1%
Seldom	154	12%
Sometimes	542	43%
Frequently	547	43%
No response/ambiguous response	21	2%
c. Work collaboratively to solve problems		
Never	13	1%
Seldom	59	5%
Sometimes	400	31%
Frequently	784	61%
No response/ambiguous response	19	1%

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

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

#### **Some Teaching Practices**

	Province*		
Number of Respondents	1	1 275	
	#	%₀†	
d. Discuss mathematical ideas and relationships			
Never	5	<1%	
Seldom	63	5%	
Sometimes	409	32%	
Frequently	776	61%	
No response/ambiguous response	22	2%	
e. Conduct mathematical investigations (e.g., to demonstrate the inquiry process)			
Never	19	1%	
Seldom	237	19%	
Sometimes	633	50%	
Frequently	367	29%	
No response/ambiguous response	19	1%	
f. Explain the reasoning behind their answers			
Never	1	<1%	
Seldom	18	1%	
Sometimes	264	21%	
Frequently	973	76%	
No response/ambiguous response	19	1%	
g. Write solutions using mathematical language and symbols			
Never	1	<1%	
Seldom	7	1%	
Sometimes	177	14%	
Frequently	1 070	84%	
No response/ambiguous response	20	2%	

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

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

#### **Some Teaching Practices**

	Province <sup>*</sup>	
Number of Respondents	1 275	
	#	%₀†
10a. How often did you assign homework in your mathematics course this semester or year?		
Never	130	10%
Occasionally	474	37%
Most classes	408	32%
Every class	234	18%
No response/ambiguous response	29	2%
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	917	82%
Between 31 and 45 minutes	182	16%
More than 45 minutes	7	1%
No response/ambiguous response	10	1%

<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

	Province*	
Number of Respondents	1 275	
	#	⁰∕₀†
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%	324	25%
11–25%	491	39%
26–50%	315	25%
More than 50%	106	8%
No response/ambiguous response	39	3%
b. Meetings requested by you or the parents or guardians		
0–10%	754	59%
11–25%	322	25%
26–50%	113	9%
More than 50%	48	4%
No response/ambiguous response	38	3%
c. Telephone		
0–10%	339	27%
11–25%	432	34%
26–50%	307	24%
More than 50%	161	13%
No response/ambiguous response	36	3%
d. E-mail or Web site (class or school)		
0–10%	404	32%
11–25%	297	23%
26–50%	245	19%
More than 50%	284	22%
No response/ambiguous response	45	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*	
Number of Respondents	1 275	
	#	%₁
e. Other means		
0–10%	496	39%
11–25%	53	4%
26–50%	34	3%
More than 50%	60	5%
No response/ambiguous response	632	50%

\* 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*	
Number of Respondents	1 275	
	#	%₀†
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%	736	58%
1-10%	308	24%
11–25%	82	6%
26–50%	43	3%
More than 50%	65	5%
No response/ambiguous response	41	3%
b. To discuss the link between EQAO assessments and instructional or assessment strategies		
0%	712	56%
1-10%	306	24%
11–25%	102	8%
26–50%	60	5%
More than 50%	52	4%
No response/ambiguous response	43	3%
c. To discuss their child's learning progress		
0%	19	1%
1-10%	169	13%
11–25%	336	26%
26–50%	363	28%
More than 50%	354	28%
No response/ambiguous response	34	3%

\* 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*	
Number of Respondents	1 275	
	#	%₀†
d. To discuss their child's behaviour		
0%	69	5%
1-10%	446	35%
11–25%	339	27%
26–50%	254	20%
More than 50%	132	10%
No response/ambiguous response	35	3%
e. To provide suggestions about how to support learning at home		
0%	79	6%
1-10%	345	27%
11–25%	372	29%
26–50%	271	21%
More than 50%	170	13%
No response/ambiguous response	38	3%
f. For other reasons		
0%	239	19%
1–10%	268	21%
11–25%	106	8%
26–50%	84	7%
More than 50%	65	5%
No response/ambiguous response	513	40%

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

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

#### Background and Professional Development

	Province*	
Number of Respondents	1 275	
	#	%†
13. Including this year, for how many years have you been teaching?		
a. In total		
2 years or less	52	4%
3–5 years	120	9%
6–10 years	306	24%
11 years or more	774	61%
No response/ambiguous response	23	2%
b. Mathematics at the secondary level		
2 years or less	160	13%
3–5 years	172	13%
6–10 years	284	22%
11 years or more	627	49%
No response/ambiguous response	32	3%
c. Grade 9 mathematics		
2 years or less	273	21%
3–5 years	209	16%
6–10 years	320	25%
11 years or more	442	35%
No response/ambiguous response	31	2%

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

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

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

	Prov	/ince <sup>*</sup>
Number of Respondents	1 275	
	#	<b>%</b> †
14. What best describes your area of study during your post-secondary education? <sup>‡</sup>		
Mathematics major or specialist	477	37%
Mathematics-related major or specialist (e.g., business, science, engineering, computer science)	430	34%
Other major with a mathematics minor	159	12%
Other major with a mathematics-related minor	67	5%
Area of study unrelated to mathematics	110	9%
No response/ambiguous response	32	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	/ince <sup>*</sup>	
Number of Respondents	1	1 275	
	#	%	
15. Which of the following courses have you completed or are you presently enrolled in? <sup>†</sup>			
Intermediate Additional Basic Qualifications in Mathematics	449	35%	
Senior Additional Basic Qualifications in Mathematics	439	34%	
Honour Specialist Additional Qualifications in Mathematics	351	28%	
Additional Qualifications in Integration of Information and Computer Technology in Instruction (Part I or II or Specialist)	79	6%	
Additional Qualifications in English as a Second Language (Part I or II or Specialist)	111	9%	
Additional Qualifications in Special Education (Part I or II or Specialist)	441	35%	
None of the above	217	17%	

\* 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**

	Province*	
Number of Respondents	1 275	
	#	%₀†
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	1 124	88%
No	118	9%
No response/ambiguous response	33	3%
b. Integration of information and computer technology into mathematics instruction		
Yes	911	71%
No	317	25%
No response/ambiguous response	47	4%
c. Developing students' critical thinking or problem-solving skills in mathematics		
Yes	999	78%
No	230	18%
No response/ambiguous response	46	4%
d. Instructional strategies for differentiated instruction (in any subject)		
Yes	996	78%
No	238	19%
No response/ambiguous response	41	3%
e. Teaching students with special needs		
Yes	601	47%
No	606	48%
No response/ambiguous response	68	5%

\* 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	1 275	
	#	%₀†
17a. Do you count some or all components of the Grade 9 Assessment of Mathematics as part of your students' class marks?		
Yes	1 220	96%
No	30	2%
No response/ambiguous response	25	2%

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

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

	Province*	
Number of Respondents	1 220	
	#	%†
17b. If yes, for how much do they count? <sup>‡</sup>		
1-5%	259	21%
6–10%	593	49%
11–15%	230	19%
16–20%	56	5%
21–25%	12	1%
26–30%	22	2%
Other	19	2%
No response/ambiguous response	29	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	1 204	99%
No	11	1%
No response/ambiguous response	5	<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	1 020	84%
No	70	6%
Undecided	124	10%
No response/ambiguous response	6	<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

	Province*	
Number of Respondents	1 220	
	#	%
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	346	28%
Mathematics department	782	64%
School principal or vice-principal	200	16%
Individual Grade 9 mathematics teachers	217	18%
Grade 9 mathematics teachers as a group	402	33%
Don't know	65	5%
Other	10	1%
21. Who decides which questions count as part of your students' class marks? $^{\dagger\ddagger}$		
School-board staff	109	9%
Mathematics department	568	47%
School principal or vice-principal	68	6%
Individual Grade 9 mathematics teachers	355	29%
Grade 9 mathematics teachers as a group	521	43%
Don't know	40	3%
Other	6	<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	1 220	
	#	%₀†
22. Which types of questions count as part of your		
students' class marks?*		
a. Open-response questions		
All questions	527	43%
Some questions	477	39%
No questions	157	13%
No response/ambiguous response	59	5%
b. Multiple-choice questions		
All questions	968	79%
Some questions	209	17%
No questions	15	1%
No response/ambiguous response	28	2%

<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

	Province*	
Number of Respondents	720	
	#	<b>%</b> †
23. Which strands count as part of your students' class marks? $\ddagger$		
a. Number Sense and Algebra		
All questions	208	29%
Some questions	432	60%
No questions	3	<1%
No response/ambiguous response	77	11%
b. Linear Relations		
All questions	205	28%
Some questions	438	61%
No questions	2	<1%
No response/ambiguous response	75	10%
c. Measurement and Geometry		
All questions	201	28%
Some questions	441	61%
No questions	1	<1%
No response/ambiguous response	77	11%
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	1 275	
	#	%₀†
24. Do you believe that the time allotted this year to complete the Grade 9 Assessment of Mathematics was sufficient?		
Yes	1 164	91%
No	48	4%
No response/ambiguous response	63	5%
25. I would prefer to answer this questionnaire online (through the Internet).		
Strongly disagree or disagree	294	23%
Neither agree nor disagree	378	30%
Agree or strongly agree	546	43%
No response/ambiguous response	57	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.