THERE ARE NO QUESTIONS ON THIS PAGE

TQM2 - 3

2.   Are you female or male?

*Check **one** box only.*

TQM2 - 4

5. **In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to teach each of the following subjects?**

NRC Note: <List only the generic science courses appropriate for your country.>

7. **APPROXIMATELY how many hours per week do you normally spend on each of the following activities outside the formal school day? Do not include time already accounted for in Question # 6.**

*Check **one** box in each row.*

		None	*Less than 1 hour*	*1 - 2 hours*	*3 - 4 hours*	*More than 4 hours*
a)	preparing or grading student tests or exams	☐	☐	☐	☐	☐
b)	reading and grading other student work	☐	☐	☐	☐	☐
c)	planning lessons by yourself	☐	☐	☐	☐	☐
d)	meeting with students outside of classroom time (e.g., tutoring, guidance)	☐	☐	☐	☐	☐
e)	meeting with parents	☐	☐	☐	☐	☐
f)	professional reading and development activity (e.g., seminars, conferences, etc.)	☐	☐	☐	☐	☐
g)	keeping students' records up to date	☐	☐	☐	☐	☐
h)	administrative tasks including staff meetings (e.g. photocopying, displaying students' work)	☐	☐	☐	☐	☐
i)	other	☐	☐	☐	☐	☐

8. **APPROXIMATELY how many hours per week do you normally spend on your teaching activities altogether (include time spent in and out of school)?**

*Please **round** to the nearest whole hour.* .... _____

9. **About how often do you have meetings with other teachers in your subject area to discuss and plan curriculum or teaching approaches?**

*Check **one** box only.*

never .... ☐

once or twice a year .... ☐

every other month .... ☐

once a month .... ☐

once a week .... ☐

two or three times a week .... ☐

almost every day .... ☐

10. **How much influence do you have on each of the following...**

*Check **one** box in each row.*

	None	*Little*	*Some*	*A lot*
a) subject matter to be taught	☐	☐	☐	☐
b) specific textbooks to be used	☐	☐	☐	☐
c) the amount of money to be spent on supplies	☐	☐	☐	☐
d) what supplies are purchased................................	☐	☐	☐	☐

11. **To be good at mathematics at school, how important do you think it is for students to...**

*Check **one** box in each row.*

	Not important	*Somewhat important*	*Very important*
a) remember formulas and procedures...............................	☐	☐	☐
b) think in a sequential and procedural manner	☐	☐	☐
c) understand mathematical concepts, principles, and strategies	☐	☐	☐
d) be able to think creatively	☐	☐	☐
e) understand how mathematics is used in the real world ..	☐	☐	☐
f) be able to provide reasons to support their solutions	☐	☐	☐

12. To what extent do you agree or disagree with each of the following statements?

*Check **one** box in each row.*

		Strongly disagree	*Disagree*	*Agree*	*Strongly agree*
a)	Mathematics is primarily an abstract subject.	☐	☐	☐	☐
b)	Mathematics is primarily a formal way of representing the real world.	☐	☐	☐	☐
c)	Mathematics is primarily a practical and structured guide for addressing real situations.	☐	☐	☐	☐
d)	If students are having difficulty, an effective approach is to give them more practice by themselves during the class.	☐	☐	☐	☐
e)	Some students have a natural talent for mathematics and others do not.	☐	☐	☐	☐
f)	More than one representation (picture, concrete material, symbol set, etc.) should be used in teaching a mathematics topic.	☐	☐	☐	☐
g)	Mathematics should be learned as sets of algorithms or rules that cover all possibilities.	☐	☐	☐	☐
h)	Basic computational skills on the part of the teacher are sufficient for teaching <PRIMARY SCHOOL> mathematics.	☐	☐	☐	☐
i)	A liking for and understanding of students are essential for teaching mathematics.	☐	☐	☐	☐

13. **Indicate your familiarity with each of the following documents:**

NRC Note: <Include country-specific appropriate options only.>

*Check **one** box in each row.*

	No such document	Not familiar	Fairly familiar	Very familiar
a) <THE NATIONAL CURRICULUM GUIDE FOR MATHEMATICS>	☐	☐	☐	☐
b) <THE REGIONAL CURRICULUM GUIDE(S) FOR MATHEMATICS>	☐	☐	☐	☐
c) <THE SCHOOL CURRICULUM GUIDE>	☐	☐	☐	☐
d) <THE NATIONAL EXAMINATION SPECIFICATIONS>	☐	☐	☐	☐
e) <THE REGIONAL EXAMINATION SPECIFICATIONS>	☐	☐	☐	☐
f) <THE NATIONAL PEDAGOGY GUIDE FOR MATHEMATICS>	☐	☐	☐	☐
g) <THE REGIONAL PEDAGOGY GUIDE FOR MATHEMATICS>	☐	☐	☐	☐

14. **How well prepared do you feel you are to teach…**

*Check **one** box in each row.*

	I do not teach these topics	Not well prepared	Somewhat prepared	Very well prepared
a) fractions, decimals and percentages?	☐	☐	☐	☐
b) ratios and proportions?	☐	☐	☐	☐
c) measurement – units, instruments, and accuracy?	☐	☐	☐	☐
d) perimeter, area, and volume?	☐	☐	☐	☐
e) geometric figures – definitions and properties? ...	☐	☐	☐	☐
f) geometric figures – symmetry, motions and transformations, congruence and similarity?	☐	☐	☐	☐
g) coordinate geometry?	☐	☐	☐	☐
h) algebraic representation?	☐	☐	☐	☐
i) evaluate and perform operations on algebraic expressions?	☐	☐	☐	☐
j) solving linear equations and inequalities?	☐	☐	☐	☐
k) representation and interpretation of data in graphs, charts, and tables?	☐	☐	☐	☐
l) simple probabilities – understanding and calculations?	☐	☐	☐	☐

15. **What is the highest level of formal education you have completed?**

*Check **one** box only.*

<DID NOT COMPLETE SECONDARY SCHOOL> .... ☐

<SECONDARY ONLY> .... ☐

<BA OR EQUIVALENT> .... ☐

<MA/PHD> .... ☐

16a. **Do you have a <teacher training certificate>?**

*Check **one** box only.* .... *Yes* ☐   *No* ☐

16b. **How many years of <pre-service teacher training> have you had?**

Please round to the nearest whole number. ....   _____
(Write in 0 (zero), if you have not had any teacher training.)

16c. **If you have had <pre-service teacher training>, did you begin this training in secondary school?**

*Check **one** box only.* .... *Yes* ☐   *No* ☐

17. **While studying to obtain your <BA or equivalent or teacher training certificate>, what was your major or main area of study?**

I do not have a <BA or equivalent or teacher training certificate.> .... ☐
(Check the box and skip to the next question.)

*Check **one** box in each row.*

		Yes	*No*
a)	Mathematics	☐	☐
b)	Biology	☐	☐
c)	Physics	☐	☐
d)	Chemistry	☐	☐
e)	Education	☐	☐
f)	Mathematics Education	☐	☐
g)	Science Education	☐	☐
h)	Other	☐	☐

18. **If you have a master's degree, what was your major or main area of study?**

I do not have a master's degree. .... ☐
(Check the box and skip to the next question.)

*Check **one** box in each row.*

		Yes	*No*
a)	Mathematics	☐	☐
b)	Biology	☐	☐
c)	Physics	☐	☐
d)	Chemistry	☐	☐
e)	Education	☐	☐
f)	Mathematics Education	☐	☐
g)	Science Education	☐	☐
h)	Other	☐	☐

International Option

19. **Was teaching your first choice as a career when beginning university or teacher education college?**

*Check only **one** box.* .... *Yes* ☐   *No* ☐

20. **Would you change to another career if you had the opportunity?**

*Check only **one** box.* .... *Yes* ☐   *No* ☐

21. **Do you think that society appreciates your work?**

*Check only **one** box* .... *Yes* ☐   *No* ☐

22. **Do you think your students appreciate your work?**

*Check only **one** box.* .... *Yes* ☐   *No* ☐

23. **Approximately how many books are in your home?**

(Do not count magazines or newspapers.)

*Check **one** box only.*

none or very few (0-10) .... ☐

enough to fill a shelf (11-25) .... ☐

enough to fill a bookcase (26-100) .... ☐

enough to fill two bookcases (101-200) .... ☐

enough to fill three or more bookcases (more than 200) .... ☐

THERE ARE NO QUESTIONS ON THIS PAGE

Section B

1.   How many students are in your mathematics class?

TQM2 - 14

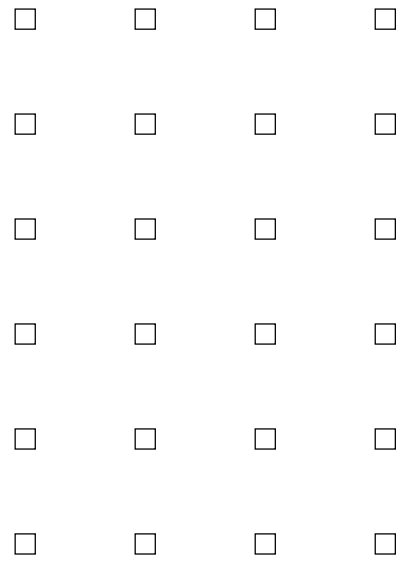**9.** **In planning mathematics lessons, what is your main source of written information when...**

NRC Note: <List only country-specific appropriate options.>

*Check **one** box in each row.*

> *<Na i   al   Regi   al E a i a i   S ecifica i   >*
>
> *<Na i   al   Regi   al C   ic l   G ide>*
>
> *<Sch   l C   ic l   G ide>*
>
> *Teache Edi i   f Te b   k*
>
> *S de   Edi i   f Te b   k*
>
> *O he Re   ce B   k*

		□	□	□	□	□	□
a)	deciding which topics to teach (goals)	□	□	□	□	□	□
b)	deciding how to present a topic	□	□	□	□	□	□
c)	selecting problems and exercises for work in class and homework	□	□	□	□	□	□
d)	selecting problems and applications for assessment and evaluation	□	□	□	□	□	□

10. **In your mathematics lessons, how often do you usually ask students to do the following?**

*Check **one** box in each row.*

		Never or almost never	*Some lessons*	*Most lessons*	*Every lesson*
a)	explain the reasoning behind an idea	□	□	□	□
b)	represent and analyze relationships using tables, charts, or graphs	□	□	□	□
c)	work on problems for which there is no immediately obvious method of solution	□	□	□	□
d)	use computers to solve exercises or problems	□	□	□	□
e)	write equations to represent relationships............	□	□	□	□
f)	practice computational skills...............................	□	□	□	□
g)	use graphing calculators to solve exercises or problems	□	□	□	□

☐   ☐   ☐   ☐

☐   ☐   ☐   ☐

☐   ☐   ☐   ☐

☐   ☐   ☐   ☐

☐   ☐   ☐   ☐

☐   ☐   ☐   ☐

13. **The following list includes the main topics addressed by the TIMSS mathematics test. Check the response that describes when students in your mathematics class have been taught each topic.**

*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	Taught 1-5	*Taught more than 5*	*Not*	*I do*
Taught				

*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	Taught before this year	Taught 1-5 periods this year	Taught more than 5 periods this year	Not yet taught	I do not know
c) Geometry					
19) Cartesian coordinates of points in a plane	☐	☐	☐	☐	☐
20) Coordinates of points on a given straight line .	☐	☐	☐	☐	☐
21) Simple two dimensional geometry – angles on a straight line, parallel lines, triangles and quadrilaterals	☐	☐	☐	☐	☐
22) Congruence and similarity	☐	☐	☐	☐	☐
23) Symmetry and transformations (reflection and rotation)	☐	☐	☐	☐	☐
24) Visualization of three-dimensional shapes	☐	☐	☐	☐	☐
d) Proportionality					
25) Scales applied to maps and models	☐	☐	☐	☐	☐
26) Concepts of ratio and proportion; ratio and proportion problems	☐	☐	☐	☐	☐

14. In your view to what extent do the following limit how you teach your mathematics class?

*Check **one** box in each row.*

		Not at all	*A little*	*Quite a lot*	*A great deal*
a)	students with different academic abilities	☐	☐	☐	☐
b)	students who come from a wide range of backgrounds, (e.g., economic, language)	☐	☐	☐	☐
c)	students with special needs, (e.g., hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)	☐	☐	☐	☐
d)	uninterested students	☐	☐	☐	☐
e)	disruptive students	☐	☐	☐	☐
f)	parents interested in their children's learning and progress	☐	☐	☐	☐
g)	parents uninterested in their children's learning and progress	☐	☐	☐	☐
h)	shortage of computer hardware	☐	☐	☐	☐
i)	shortage of computer software	☐	☐	☐	☐
j)	shortage of other instructional equipment for students' use	☐	☐	☐	☐
k)	shortage of equipment for your use in demonstrations and other exercises	☐	☐	☐	☐
l)	inadequate physical facilities	☐	☐	☐	☐
m)	high student/teacher ratio	☐	☐	☐	☐
n)	low morale among fellow teachers/administrators	☐	☐	☐	☐
o)	low morale among students	☐	☐	☐	☐
p)	threat(s) to personal safety or the safety of students				

16. **If you assign mathematics homework, how many minutes of mathematics homework do you usually assign your students?**

(Consider the time it would take an average student in your class.)

*Check **one** box.*

less than 15 minutes .... ☐

17. If you assign mathematics homework, how often do you assign each of the following kinds of tasks?

*Check **one** box in each row.*

		Never	*Rarely*	*Sometimes*	*Always*
a)	worksheets or workbook	☐	☐	☐	☐
b)	problem/question sets in textbook	☐	☐	☐	☐
c)	reading in a textbook or supplementary materials	☐	☐	☐	☐
d)	writing definitions or other short writing assignment	☐	☐	☐	☐
e)	small investigation(s) or gathering data	☐	☐	☐	☐
f)	working individually on long term projects or experiments	☐	☐	☐	☐
g)	working as a small group on long term projects or experiments	☐	☐	☐	☐
h)	finding one or more uses of the content covered	☐	☐	☐	☐
i)	preparing oral reports either individually or as a small group	☐	☐	☐	☐
j)	keeping a journal	☐	☐	☐	☐

18.   If students are assigned

20. **How often do you use the assessment information you gather from students to...**

*Check **one** box in each row.*

		None	Little	Quite a lot	A great deal
a)	provide students' grades or marks?	☐	☐	☐	☐
b)	provide feedback to students?	☐	☐	☐	☐
c)	diagnose students' learning problems?	☐	☐	☐	☐
d)	report to parents?	☐	☐	☐	☐
e)	assign students to different programs or tracks?	☐	☐	☐	☐
f)	plan for future lessons?	☐	☐	☐	☐

**THANK YOU for the thought, time, and effort you have
put into completing this questionnaire.**