# 2012 NATIONAL SURVEY OF SCIENCE AND MATHEMATICS EDUCATION MATHEMATICS TEACHER QUESTIONNAIRE

# Section A. Teacher Background and Opinions

1.	How many years have you taught prior to this school year: [Enter each response as a whole number
	(for example: 15).]
	a. any subject at the K-12 level?
	b. mathematics at the K–12 level?
	c. at this school, any subject?

2. At what grade levels do you currently teach mathematics? [Select all that apply.]

 <u> </u>
K-5
6–8
9–12
You do not currently teach mathematics

### 3. [Presented to self-contained teachers only]

Which best describes the mathematics instruction provided to the entire class?

- Do not consider pull-out instruction that some students may receive for remediation or enrichment.
- Do not consider instruction provided to individual or small groups of students, for example by an English-language specialist, special educator, or teacher assistant.

	This class receives mathematics instruction only from you. [Presented only to teachers who answered in Q2 that they
	teach mathematics]
	This class receives mathematics instruction from you and another teacher (for example: a mathematics specialist or a
0	teacher you team with). [Presented only to teachers who answered in Q2 that they teach mathematics]

#### **4.** [Presented to self-contained teachers only]

Which best describes your mathematics teaching?

0	I teach mathematics all or most days, every week of the year.
0	I teach mathematics every week, but typically three or fewer days each week.
0	I teach mathematics some weeks, but typically not every week.

#### 5. [Presented to self-contained teachers only]

Which best describes your science teaching?

	<b>J</b>				
0	I teach science all or most days, every week of the year.				
0	I teach science every week, but typically three or fewer days each week.				
0	I teach science some weeks, but typically not every week. [Skip to Q7]				
0	I do not teach science.				

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### **6.** [Presented to self-contained teachers only]

In a typical week, how many days do you teach lessons on each of the following subjects and how many minutes per week are spent on each subject? [Enter each response as a whole number (for example: 5, 150).]

		Number of days per week	Total number of minutes per week
a.	Mathematics		
b.	Science		
c.	Social Studies		
d.	Reading/Language Arts		

[SKIP to Q8]

7. [Presented to self-contained teachers only] In a typical year, how many weeks do you teach lessons on each of the following subjects and how many minutes per week are spent on each subject? [Enter each response as a whole number (for example: 36, 150).]

		Number of weeks per year	Average number of minutes per week when taught
a.	Mathematics		
b.	Science		
c.	Social Studies		
d.	Reading/Language Arts		

#### **8.** [Presented to non-self-contained teachers only]

In a typical week, how many different mathematics classes do you teach?

- If you meet with the same class of students multiple times per week, count that class only once.
- If you teach the *same mathematics course* to multiple classes of students, count each class separately.

1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0

## 9. [Presented to non-self-contained teachers only]

For each mathematics class you teach, select the course type and enter the number of students enrolled in the class.

Grades 9-12 Course Type	Example Courses
Non-college prep	Developmental Math; High School Arithmetic; Remedial Math; General Math; Vocational
mathematics courses	Math; Consumer Math; Basic Math; Business Math; Career Math; Practical Math; Essential
	Math; Pre-Algebra; Introductory Algebra; Algebra 1 Part 1; Algebra 1A; Math A; Basic
	Geometry; Informal Geometry; Practical Geometry
Formal/College-prep	Algebra 1; Integrated Math 1; Unified Math I; Algebra 1 Part 2; Algebra 1B; Math B
Mathematics Level 1	
courses	
Formal/College-prep	Geometry; Plane Geometry; Solid Geometry; Integrated Math 2; Unified Math II; Math C
Mathematics Level 2	
courses	
Formal/College-prep	Algebra 2; Intermediate Algebra; Algebra and Trigonometry; Advanced Algebra; Integrated
Mathematics Level 3	Math 3; Unified Math III
courses	
Formal/College-prep	Algebra 3; Trigonometry; Pre-Calculus; Analytic/Advanced Geometry; Elementary Functions;
Mathematics Level 4	Integrated Math 4; Unified Math IV; Calculus (not including college level/AP); any other
courses	College Prep Senior Math with Algebra 2 as a prerequisite
Mathematics courses that	Advanced Placement Calculus (AB, BC); Advanced Placement Statistics; IB Mathematics
might qualify for college	standard level; IB Mathematics higher level; concurrent college and high school credit/dual
credit	enrollment

Class	Course Type	Number of Students
Your 1 <sup>st</sup> mathematics class:		
Your 2 <sup>nd</sup> mathematics class:		
Your N <sup>th</sup> mathematics class:		

Course Ty	Course Type List			
1	Mathematics (Grades K–5)			
2	Remedial Mathematics 6			
3	Regular Mathematics 6			
4	Accelerated/Pre-Algebra Mathematics 6			
5	Remedial Mathematics 7			
6	Regular Mathematics 7			
7	Accelerated Mathematics 7			
8	Remedial Mathematics 8			
9	Regular Mathematics 8			
10	Accelerated Mathematics 8			
11	Algebra 1, Grade 7 or 8			
12	Non-college prep mathematics course (Grades 9–12)			
13	Formal/College-prep Mathematics Level 1 course (Grades 9–12)			
14	Formal/College-prep Mathematics Level 2 course (Grades 9–12)			
15	Formal/College-prep Mathematics Level 3 course (Grades 9–12)			
16	Formal/College-prep Mathematics Level 4 course (Grades 9–12)			
17	Mathematics course that might qualify for college credit (Grades 9–12)			

Later in this questionnaire, we will ask you questions about your randomly selected mathematics class, which you indicated was [course type teacher selected in Q9]. What is your school's title for this course? \_\_\_\_\_

11. Have you been awarded one or more bachelor's and/or graduate degrees in the following fields? (With regard to bachelor's degrees, count only areas in which you majored.) [Select one on each row.]

		Yes	No
a.	Education, including mathematics education	0	0
b.	Mathematics	0	0
c.	Computer Science	0	0
d.	Engineering	0	0
e.	Other, please specify	0	0

#### 12. [Presented only to teachers that answered "Yes" to Q11a]

What type of education degree do you have? (With regard to bachelor's degrees, count only areas in which you majored.) [Select all that apply.]

 <i>y y</i> .	11 / -		
Elementary Education			
□ Mathematics Education			
Science Education			
Other Education, please specify.			

- **13.** For each of the following areas, indicate the number of semester and/or quarter mathematics courses you completed.
  - Count *courses* **not** credit hours.
  - Include courses taken at the graduate or undergraduate level, as well as courses for which you received college credit while you were in high school.
  - Count each course taken in high school for college credit as a one semester college course.
  - Count courses that lasted multiple semesters or quarters as multiple courses.
  - If your transcripts are not available, provide your best estimates.
  - Enter your responses as whole numbers (for example: 3). You may either enter 0 (zero) or leave the box empty wherever applicable.

		Number of SEMESTER	Number of QUARTER
		college courses	college courses
a.	Mathematics content for elementary school teachers		
b.	Mathematics content for middle school teachers		
c.	Mathematics content for high school teachers		
d.	Integrated mathematics (a single course that addresses content across		
	multiple mathematics subjects, such as algebra and geometry)		
e.	College algebra/trigonometry/functions		
f.	Abstract algebra (for example: groups, rings, ideals, fields) [Presented to		
	grades 6–12 teachers only]		
g.	Linear algebra (for example: vectors, matrices, eigenvalues) [Presented to		
	grades 6–12 teachers only]		
h.	Calculus		
i.	Advanced calculus [Presented to grades 6–12 teachers only]		
j.	Real analysis [Presented to grades 6–12 teachers only]		
k.	Differential equations [Presented to grades 6–12 teachers only]		
1.	Analytic/Coordinate Geometry (for example: transformations or isometries,		
	conic sections) [Presented to grades 6-12 teachers only]		
m.	Axiomatic Geometry (Euclidean or non-Euclidean) [Presented to grades 6–		
	12 teachers only]		
n.	College geometry [Presented to grades K-5 teachers only]		
0.	Probability		
p.	Statistics		
q.	Number theory (for example: divisibility theorems, properties of prime		
	numbers) [Presented to grades 6–12 teachers only]		
r.	Discrete mathematics (for example: combinatorics, graph theory, game		
	theory)		
S.	Other upper division mathematics		

- **14.** For each of the following areas, indicate the number of semester and/or quarter courses you completed.
  - Count *courses* **not** credit hours.
  - Include courses taken at the graduate or undergraduate level, as well as courses for which you received college credit while you were in high school.
  - Count each course taken in high school for college credit as a one semester college course.
  - Count courses that lasted multiple semesters or quarters as multiple courses.
  - If your transcripts are not available, provide your best estimates.
  - Enter your responses as whole numbers (for example: 3). You may either enter 0 (zero) or leave the box empty wherever applicable.

		Number of SEMESTER college courses	Number of QUARTER college courses
a.	Computer science		
b.	Engineering		
c.	Science		

15. I	How many of the undergraduate and graduate level mathematics courses you completed were taken
8	at each of the following types of institutions? (Please do not include mathematics education courses.)
[	[Enter each response as a whole number (for example: 15).]

a.	Two-year college,	community college	and/or technical	school
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**16.** Which of the following best describes your teacher certification program?

0	An undergraduate program leading to a bachelor's degree and a teaching credential
0	A post-baccalaureate credentialing program (no master's degree awarded)
0	A master's program that also awarded a teaching credential
0	You do not have any formal teacher preparation

17. When did you last participate in professional development (sometimes called in-service education) focused on mathematics or mathematics teaching? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups. Do not include formal courses for which you received college credit or time spent providing professional development for other teachers.)

	01	L	
0	In the last 3 years		
0	4–6 years ago		
0	7–10 years ago		GI: 4 021
0	More than 10 years ago	7	Skip to Q21
0	Never	J	

**18.** In the last 3 years have you... [Select one on each row.]

		Yes	No
a.	attended a workshop on mathematics or mathematics teaching?	0	0
b.	attended a national, state, or regional mathematics teacher association meeting?	0	0
c.	participated in a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching?	0	0
	mathematics of mathematics teaching?		

b. Four-year college and/or university \_\_\_\_\_

19. What is the total amount of time you have spent on professional development in mathematics or mathematics teaching in the last 3 years? (Include attendance at professional meetings, workshops, and conferences, as well as professional learning communities/lesson studies/teacher study groups.
Do not include formal courses for which you received college credit or time spent providing professional development for other teachers.)

1	1 /
0	Less than 6 hours
0	6–15 hours
0	16–35 hours
0	More than 35 hours

**20.** Thinking about all of your mathematics-related professional development **in the last 3 years**, to what extent does each of the following describe your experiences? [Select one on each row.]

		Not at				To a great
		all		Somewhat		extent
a.	You had opportunities to engage in mathematics investigations.	1	2	3	4	(5)
b.	You had opportunities to examine classroom artifacts (for example: student work samples).	1	2	3	4	\$
c.	You had opportunities to try out what you learned in your classroom <i>and</i> then talk about it as part of the professional development.	1	2	3	4	(5)
d.	You worked closely with other mathematics teachers from your school.	1)	2	3	4	\$
e.	You worked closely with other mathematics teachers who taught the same grade and/or subject whether or not they were from your school.	1	2	3	4	(5)
f.	The professional development was a waste of your time.	1	2	3	4	5

**21.** When did you last take a formal course for **college credit** in each of the following areas? Do not count courses for which you received only Continuing Education Units. [Select one on each row.]

·	In the last 3 years	4 – 6 years ago	7 – 10 years ago	More than 10 years ago	Never
a. Mathematics	0	0	0	0	0
b. How to teach					
mathematics	0	0	0	0	0
c. Student teaching in					
mathematics	0	0	0	0	0
d. Student teaching in other					
subjects	0	0	0	0	0

## 22. [Presented only to teachers that have participated in professional development in the last three years as indicated in Q17, OR took a course in "Mathematics" or "How to teach mathematics" in the last three years as indicated in q21a/b]

Considering all the opportunities to learn about mathematics or the teaching of mathematics (professional development and coursework) in the last 3 years, how much was each of the following emphasized? [Select one on each row.]

		Not at				To a great
		all		Somewhat		extent
a.	Deepening your own mathematics content knowledge	1	2	3	4	(5)
b.	Learning how to use hands-on activities/manipulatives for mathematics instruction	1)	2	3	4	(3)
c.	Learning about difficulties that students may have with particular mathematical ideas and procedures	1	2	3	4	(5)
d.	Finding out what students think or already know about the key mathematical ideas prior to instruction on those ideas	1	2	3	4	(3)
e.	Implementing the mathematics textbook/program to be used in your classroom	1	2	3	4	(5)
f.	Planning instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	1)	2	3	4	(G)
g.	Monitoring student understanding during mathematics instruction	1)	2	3	4	(5)
h.	Providing enrichment experiences for gifted students	1	2	3	4	(5)
i.	Providing alternative mathematics learning experiences for students with special needs	1	2	3	4	\$
j.	Teaching mathematics to English-language learners	1	2	3	4	(5)
k.	Assessing student understanding at the conclusion of instruction on a topic	1	2	3	4	\$

## **23. In the last 3 years** have you... [Select one on each row.]

		Yes	No
a.	received feedback about your mathematics teaching from a mentor/coach <b>formally assigned</b> by the school or district/diocese?	0	0
b.	served as a <b>formally assigned</b> mentor/coach for mathematics teaching? (Please do not include supervision of student teachers.)	0	0
c.	supervised a student teacher in your classroom?	0	0
d.	taught in-service workshops on mathematics or mathematics teaching?	0	0
e.	led a professional learning community/lesson study/teacher study group focused on mathematics or mathematics teaching?	0	0

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### 24. [Presented to self-contained teachers only]

Many teachers feel better prepared to teach some subjects/topics than others. How well prepared do you feel to teach each of the following **at the grade level(s) you teach**, whether or not they are currently included in your teaching responsibilities? [Select one on each row.]

, , , , , , , , , , , , , , , , , , ,	Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a. Number and Operations	1	2	3	4
b. Early Algebra	1	2	3	4
c. Geometry	1	2	3	4
d. Measurement and Data Representation	0	2	3	4
e. Science	1	2	3	4
f. Reading/Language Arts	①	2	3	4
g. Social Studies	1	2	3	4

#### 25. [Presented to non-self-contained teachers only]

Within mathematics many teachers feel better prepared to teach some topics than others. How prepared do you feel to teach each of the following topics at the grade level(s) you teach, whether or not they are currently included in your curriculum? [Select one on each row.]

		Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a.	The number system and operations	1	2	3	4
b.	Algebraic thinking	1	2	3	4
c.	Functions	1	2	3	4
d.	Modeling	1	2	3	4
e.	Measurement	1	2	3	4
f.	Geometry	1	2	3	4
g.	Statistics and probability	1	2	3	4
h.	Discrete mathematics	1	2	3	4

**26.** How well prepared do you feel to do each of the following in your mathematics instruction? [Select one on each row.]

-	on each row.j	T	ı		ı
		Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a.	Plan instruction so students at different levels of achievement can increase their understanding of the ideas targeted in each activity	1	2	3	4
b.	Teach mathematics to students who have learning disabilities	①	2	3	4
c.	Teach mathematics to students who have physical disabilities	①	2	3	4
d.	Teach mathematics to English-language learners	1	2	3	4
e.	Provide enrichment opportunities for gifted students	①	0	3	4
f.	Encourage students' interest in mathematics	1)	2	3	4
g.	Encourage participation of females in mathematics	1	2	3	4
h.	Encourage participation of racial or ethnic minorities in mathematics	0	2	3	4
i.	Encourage participation of students from low socioeconomic backgrounds in mathematics	1	2	3	4
j.	Manage classroom discipline	1	2	3	4

27. Please provide your opinion about each of the following statements. [Select one on each row.]

		Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
a.	Students learn mathematics best in classes with students of similar abilities.	1	2	3	4	\$
b.	Inadequacies in students' mathematics background can be overcome by effective teaching.	0	2	3	4	\$
c.	It is better for mathematics instruction to focus on ideas in depth, even if that means covering fewer topics.	①	2	3	4	\$
d.	Students should be provided with the purpose for a lesson as it begins.	1	2	3	4	\$
e.	At the beginning of instruction on a mathematical idea, students should be provided with definitions for new vocabulary that will be used.	①	2	3	4	\$
f.	Teachers should explain an idea to students before having them investigate the idea.	①	2	3	4	\$
g.	Most class periods should include some review of previously covered ideas and skills.	①	2	3	4	\$
h.	Most class periods should provide opportunities for students to share their thinking and reasoning.	0	2	3	4	\$
i.	Hands-on activities/manipulatives should be used primarily to reinforce a mathematical idea that the students have already learned.	0	2	3	4	\$
j.	Students should be assigned homework most days.	①	2	3	4	3
k.	Most class periods should conclude with a summary of the key ideas addressed.	1	2	3	4	3

#### **Section B. Your Mathematics Instruction**

The rest of this questionnaire is about your mathematics instruction in this class.

28.	[Presented]	to non-sel	f-contained	teachers on	lvl

On average, how many minutes per week does this class meet? [Enter your response as a whole number (for example: 300).]

**29.** Enter the number of students for each grade represented in this class. [Enter each response as a whole number (for example: 15).]

whole number (for example, 15).]						

**30.** For the students in this class, indicate the number of males and females in each of the following categories of race/ethnicity. [Enter each response as a whole number (for example: 15).]

		Males	Females
a.	American Indian or Alaska Native		
b.	Asian		
c.	Black or African American		
d.	Hispanic/Latino		
e.	Native Hawaiian or Other Pacific Islander		
f.	White		
g.	Two or more races		

**31.** Which of the following best describes the prior mathematics achievement levels of the students in this class relative to other students in this school?

0	Mostly low achievers
0	Mostly average achievers
0	Mostly high achievers
0	A mixture of levels

**32.** How much control do you have over each of the following aspects of mathematics instruction in this class? [Select one on each row.]

		No Moderate			Strong	
		Contro	l	Control	(	Control
a.	Determining course goals and objectives	1)	2	3	4	(5)
b.	Selecting textbooks/modules	1	2	3	4	(5)
c.	Selecting content, topics, and skills to be taught	1	2	3	4	(5)
d.	Selecting teaching techniques	1	2	3	4	(5)
e.	Determining the amount of homework to be assigned	1	2	3	4	(5)
f.	Choosing criteria for grading student performance	1	2	3	4	(5)

**33.** Think about your plans for this class for the entire course/year. By the end of the course/year, how much emphasis will each of the following student objectives receive? [Select one on each row.]

			Minimal	Moderate	Heavy
		None	emphasis	emphasis	emphasis
a.	Learning mathematical procedures and/or algorithms	1	2	3	4
b.	Learning to perform computations with speed and accuracy	1	2	3	4
c.	Understanding mathematical ideas	1	2	3	4
d.	Learning mathematical practices (for example: considering	(I)	2	3	4
	how to approach a problem, justifying solutions)	•		)	9
e.	Learning about real-life applications of mathematics	1	2	3	4
f.	Increasing students' interest in mathematics	1)	2	3	4
g.	Preparing for further study in mathematics	1)	2	3	4
h.	Learning test taking skills/strategies	1)	2	3	4

**34.** How often do you do each of the following in your mathematics instruction in this class? [Select one on each row.]

	each row.j	Never	Rarely (for example: a few times a year)	Sometimes (for example: once or twice a month)	Often (for example: once or twice a week)	All or almost all mathematics lessons
a.	Explain mathematical ideas to the whole class	①	2	3	<u>(4)</u>	\$
b.	Engage the whole class in discussions	1	2	3	4	\$
c.	Have students work in small groups	1)	2	3	4	<b>⑤</b>
d.	Provide manipulatives for students to use in problem-solving/investigations	1)	2	3	4	\$
e.	Have students read from a mathematics textbook/program or other mathematics-related material in class, either aloud or to themselves	①	2	3	4	0
f.	Have students consider multiple representations in solving a problem (for example: numbers, tables, graphs, pictures)	①	2	3	4	<b>⑤</b>
g.	Have students explain and justify their method for solving a problem	①	2	3	4	\$
h.	Have students compare and contrast different methods for solving a problem	1)	2	3	4	\$
i.	Have students develop mathematical proofs	①	2	3	4	\$
j.	Have students present their solution strategies to the rest of the class	①	2	3	4	\$
k.	Have students write their reflections (for example: in their journals) in class or for homework	①	2	3	4	\$
1.	Give tests and/or quizzes that are predominantly short-answer (for example: multiple choice, true/false, fill in the blank)	①	2	3	4	©
m.	Give tests and/or quizzes that include constructed-response/open-ended items	①	2	3	4	<u></u> ⑤
n.	Focus on literacy skills (for example: informational reading or writing strategies)	1)	2	3	4	\$
0.	Have students practice for standardized tests	①	2	3	4	\$
p.	Have students attend presentations by guest speakers focused on mathematics in the workplace	1	2	3	4	\$

**35.** Which best describes the availability of each of the following for small group (4-5 students) work in this class? [Select one on each row.]

		Do not have one per group available	At least one per group available upon request or in another room	At least one per group located in your classroom
a.	Personal computers, including laptops	0	0	0
b.	Hand-held computers (for example: PDAs, tablets, smartphones, iPads)	0	0	0
c.	Internet access	0	0	0
d.	Four-function calculators	0	0	0
e.	Scientific calculators	0	0	0
f.	Graphing calculators	0	0	0
g.	Probes for collecting data (for example: motion sensors, temperature probes)	0	0	0
h.	Classroom response system or "Clickers" (handheld devices used to respond electronically to questions in class)	0	0	0

**36.** For each of the following, are students expected to provide their own for use in this mathematics class? [Select one on each row.]

		Yes	No
a.	Laptop computers	0	0
b.	Hand-held computers	0	0
c.	Four-function calculators	0	0
d.	Scientific calculators	0	0
e.	Graphing calculators	0	0

**37.** How often do students use each of the following instructional technologies in this mathematics class? [Select one on each row.]

		Never	Rarely (for example: A few times a year)	Sometimes (for example: once or twice a month)	Often (for example: once or twice a week)	All or almost all mathematics lessons
a.	Personal computers, including laptops	1	2	3	4	(S)
b.	Hand-held computers	1	2	3	4	(5)
c.	Internet	1	2	3	4	(5)
d.	Four-function calculators	1	2	3	4	(5)
e.	Scientific calculators	1)	2	3	4	(5)
f.	Graphing calculators	1)	2	3	4	(5)
g.	Probes for collecting data	1)	2	3	4	(5)
h.	Classroom response system or "Clickers"	1	2	3	4	(5)

**38.** How often are students in this class required to take mathematics tests that you did **not** develop yourself, for example state assessments or district benchmarks? Do **not** include Advanced Placement or International Baccalaureate exams or students retaking a test because of failure.

0	Never
0	Once a year
0	Twice a year
0	Three or four times a year
0	Five or more times a year

**39.** How much mathematics homework do you assign to this class in a typical **week**? (Do not include time that the class spends getting started on homework during class.)

	1 0 0
0	Fewer than 15 minutes per week
0	15–30 minutes per week
0	31–60 minutes per week
0	61–90 minutes per week
0	91–120 minutes per week
0	2–3 hours per week
0	3–4 hours per week
0	More than 4 hours per week

**40.** Which best describes the instructional materials students **most frequently** use in this class?

0	One commercially-published textbook or program most of the time
0	Multiple commercially-published textbooks/programs most of the time [Skip to Q42]
0	Non-commercially-published instructional materials most of the time [Skip to Q46]

- 41. Please indicate the title, author, most recent copyright year, and ISBN code of the textbook/program used by the students in this class.

  The 10 or 13 character ISBN code can be found on the copyright.
  - The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of your textbook/program.
  - Do not include the dashes when entering the ISBN.
  - An example of the location of the ISBN is shown to the right.

Title: First Author: Year: ISBN:

[Skip to Q43]

- **42.** Please indicate the title, author, most recent copyright year, and ISBN code of the commercially-published textbook/program used most often by the students in this class.
  - The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of your textbook/program.
  - Do not include the dashes when entering the ISBN.
  - An example of the location of the ISBN is shown to the right.

Title:
First Author:
Year:
ISBN:

**43.** How would you rate the overall quality of this textbook/program?

0	Very poor
0	Poor
0	Fair
0	Good
0	Very good
0	Excellent

# **44.** [Presented only to teachers who indicated using one commercially-published textbook/program in Q40]

Over the course of the school year, approximately what percentage of the mathematics **instructional time** will students in this class spend using this textbook/program?

0	Less than 25%
0	25–49%
0	50–74%
0	75–90%
0	More than 90%

# **45.** [Presented only to teachers who indicated using one commercially-published textbook/program in Q40]

Approximately what percentage of the chapters/units in this textbook/program will students in this class engage with during the school year?

Clubb	engage with during the sensor year.
0	Less than 25%
0	25–49%
0	50–74%
0	75–90%
0	More than 90%

**46.** Mathematics courses may benefit from the availability of particular resources. Considering what you have available, how adequate is each of the following for teaching this mathematics class? [Select one on each row.]

		Not Adequate		Somewhat Adequate		Adequate
a.	Instructional technology (for example: calculators, computers, probes/sensors)	1	2	3	4	(5)
b.	Measurement tools (for example: protractors, rulers)	1)	2	3	4	\$
c.	Manipulatives (for example: pattern blocks, algebra tiles)	1	2	3	4	(5)
d.	Consumable supplies (for example: graphing paper, batteries)	1	2	3	4	(5)

**47.** In your opinion, how great a problem is each of the following for your mathematics instruction in this class? [Select one on each row.]

		Not a significant problem	Somewhat of a problem	Serious problem
a.	Lack of access to computers	0	0	0
b.	Old age of computers	0	0	0
c.	Lack of access to the Internet	0	0	0
d.	Unreliability of the Internet connection	0	0	0
e.	Slow speed of the Internet connection	0	0	0
f.	Lack of availability of appropriate computer software	0	0	0
g.	Lack of availability of technology support	0	0	0

**48.** Please rate the effect of each of the following on your mathematics instruction in this class. [Select one on each row.]

	on each row.j	Inhibits effective instruction		Neutral or Mixed		Promotes effective instruction	N/A or Don't Know
a.	Current state standards	①	2	3	4	5	0
b.	District/Diocese curriculum frameworks [Not presented to non-Catholic private schools]	①	2	3	4	\$	0
c.	District/Diocese and/or school pacing guides	1	2	3	4	\$	Ο
d.	State testing/accountability policies [Not presented to non-Catholic private schools]	①	2	3	4	©	0
e.	District/Diocese testing/accountability policies [Not presented to non-Catholic private schools]	<b>①</b>	2	3	4	<b>⑤</b>	0
f.	Textbook/program selection policies	1	2	3	4	(\$)	0
g.	Teacher evaluation policies	1)	2	3	4	(5)	0
h.	College entrance requirements [Presented to grades 9–12 teachers only]	1	2	3	4	<b>⑤</b>	0
i.	Students' motivation, interest, and effort in mathematics	1	2	3	4	\$	0
j.	Students' reading abilities	1	2	3	4	\$	0
k.	Community views on mathematics instruction	1)	2	3	4	(5)	0
1.	Parent expectations and involvement	1)	2	3	4	\$	0
m.	Principal support	1)	2	3	4	(5)	0
n.	Time for you to plan, individually and with colleagues	1	2	3	4	\$	0
0.	Time available for your professional development	1)	2	3	4	\$	0

# **Section C. Your Most Recently Completed Mathematics Unit in this Class**

The questions in this section are about the most recently completed mathematics unit in this class.

- Depending on the structure of your class and the instructional materials you use, a unit may range from a few to many class periods.
- Do not be concerned if this unit was not typical of your instruction.

<b>49.</b> F	How many	y class p	eriods v	vere dev	oted to	instruct	ion on	the mos	t recently	completed	mathema	tics
u	ı <b>nit</b> ? [Ent	er your	response	e as a w	hole nu	ımber (fo	or exar	mple: 15)	.]			

**50.** Which of the following best describes the content focus of this unit?

0	Number and Operations
0	Measurement and Data
	Representation
0	Algebra
0	Geometry
0	Probability
0	Statistics
0	Trigonometry
0	Calculus

<b>1.</b> What mathematical ideas and/or skills were addressed in this unit?
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# **52.** [Presented only to teachers who indicated using commercially-published textbooks/programs in Q40]

Was this unit based primarily on the commercially-published textbook/program you described earlier as the one most used in this class?

- cari	er as the one most asea in this class.
0	Yes [Skip to Q55]
0	No

**53.** Was this unit based on a commercially-published textbook/program?

0	Yes
0	No [Skip to Q59]

54. Please indicate the title, author, most recent copyright year, and ISBN code of that textbook/program.

- The 10- or 13-character ISBN code can be found on the copyright page and/or the back cover of the textbook/module.
- Do not include the dashes when entering the ISBN.
- An example of the location of the ISBN is shown to the right.

Title: First Author: Year:

ISBN:

**55.** Please indicate the extent to which you did each of the following while teaching this unit. [Select one on each row.]

		Not at all		Somewhat		To a great extent
a.	You used the textbook/program to guide the overall structure and content emphasis of the unit.	1	2	3	4	(3)
b.	You followed the textbook/program to guide the detailed structure and content emphasis of the unit.	1	2	3	4	(5)
c.	You picked what is important from the textbook/program and skipped the rest.	①	2	3	4	(3)
d.	You incorporated activities (for example: problems, investigations, readings) from other sources to supplement what the textbook/program was lacking.	1	0	3	4	Ś

#### 56. [Presented only to teachers who answered "2-5" in Q55c]

During this unit, when you skipped activities (for example: problems, investigations, readings) in your textbook/program, how much was each of the following a factor in your decisions? [Select one on each row.]

		Not a factor	A minor factor	A major factor
a.	The mathematical ideas addressed in the activities you skipped are not included in your pacing guide and/or current state standards.	1)	2	3
b.	You did not have the materials needed to implement the activities you skipped.	1	2	3
c.	The activities you skipped were too difficult for your students.	1)	2	3
d.	Your students already knew the mathematical ideas or were able to learn them without the activities you skipped.	1)	2	3
e.	You have different activities for those mathematical ideas that work better than the ones you skipped.	1)	2	3

#### 57. [Presented only to teachers who answered "2-5" in Q55d]

During this unit, when you supplemented the textbook/program with additional activities, how much was each of the following a factor in your decisions? [Select one on each row.]

		Not a factor	A minor factor	A major factor
a.	Your pacing guide indicated that you should use supplemental activities.	1	2	3
b.	Supplemental activities were needed to prepare students for standardized tests.	1	2	3
c.	Supplemental activities were needed to provide students with additional practice.	1	2	3
d.	Supplemental activities were needed so students at different levels of achievement could increase their understanding of the ideas targeted in each activity.	0	2	3

**58.** How well prepared did you feel to do each of the following as part of your instruction on this

particular unit? [Select one on each row.]

		Not adequately prepared	Somewhat prepared	Fairly well prepared	Very well prepared
a.	Anticipate difficulties that students will have with particular mathematical ideas and procedures in this unit	0	2	3	4
b.	Find out what students thought or already knew about the key mathematical ideas	1	2	3	4
c.	Implement the mathematics textbook/ program to be used during this unit [Presented only to teachers who indicated using a commercially-published textbook/program in Q52/53]	0	2	3	4
d.	Monitor student understanding during this unit	1	2	3	4
e.	Assess student understanding at the conclusion of this unit	①	2	3	4

**59.** Which of the following did you do during this unit? [Select all that apply.]

Administered an assessment, task, or probe at the beginning of the unit to find out what students thought or
already knew about the key mathematical ideas
Questioned individual students during class activities to see if they were "getting it"
Used information from informal assessments of the entire class (for example: asking for a show of hands,
thumbs up/thumbs down, clickers, exit tickets) to see if students were "getting it"
Reviewed student work (for example: homework, notebooks, journals, portfolios, projects) to see if they were
"getting it"
Administered one or more quizzes and/or tests to see if students were "getting it"
Had students use rubrics to examine their own or their classmates' work
Assigned grades to student work (for example: homework, notebooks, journals, portfolios, projects)
Administered one or more quizzes and/or tests to assign grades
Went over the correct answers to assignments, quizzes, and/or tests with the class as a whole

## Section D. Your Most Recent Mathematics Lesson in this Class

The next three questions refer to the most recent mathematics lesson in this class, whether or not that instruction was part of the unit you've just been describing. Do not be concerned if this lesson included activities and/or interruptions that are not typical (for example: a test, students working on projects, a fire drill).

	w many minutes was that lesson? [Enter your response as a non-zero whole number (for example:
	these minutes, how many were spent on the following: [Enter each response as a whole number
(for	example: 15).]
a.	Non-instructional activities (for example: attendance taking, interruptions)
b.	Whole class activities (for example: lectures, explanations, discussions)
c.	Small group work
d.	Students working individually (for example: reading textbooks, completing worksheets, taking a test or quiz)

	ch of the following activities took place during that mathematics lesson? [Select all the Teacher explaining a mathematical idea to the whole class			
	Whole class discussion			
□ Students completing textbook/worksheet problems				
	Teacher conducting a demonstration while students watched			
	Students doing hands-on/manipulative activities			
	Students reading about mathematics			
	Students using instructional technology			
	Practicing for standardized tests			
	Test or quiz			
	None of the above			

# **Section E. Demographic Information**

<b>63.</b> Indicate your sea	Χ:
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0	Male
0	Female

**64.** Are you of Hispanic or Latino origin?

 	,	
0	Yes	
0	No	

**65.** What is your race? [Select all that apply.]

American Indian or Alaska Native				
Asian				
Black or African American				
Native Hawaiian or Other Pacific Islander				
White				

66.	In what year	were you b	oorn? [Enter	your response	e as a whole	number (fo	or example:	1969). l	Do not
	use commas.	.]							

Thank you!