



Mathematics Student Questionnaire

**2019
Grade 8
(Pilot)**

Pilot

NOTE: These items are being pilot tested in 2019 for possible inclusion in the 2021 NAEP operational assessment. Some items that are pilot tested may not be included in the final assessment. A pilot is a pretest that occurs prior to an assessment. Individual students will receive a subset of these 2019 pilot questions.

1. What math class are you taking this year? Select **one or more** answer choices.

- Ⓐ Eighth-grade math
- Ⓑ Introduction to algebra or pre-algebra
- Ⓒ Algebra I
- Ⓓ Geometry
- Ⓔ Algebra II
- Ⓕ Other math class. Please specify: _____

2. What math class do you expect to take next year?

- Ⓐ Basic or general math
- Ⓑ Introduction to algebra or pre-algebra
- Ⓒ Algebra I
- Ⓓ Geometry
- Ⓔ Algebra II
- Ⓕ Other math class. Please specify: _____
- Ⓖ I don't know.

3. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Very much like me	
a. I like complex problems more than easy problems.	(A)	(B)	(C)	(D)	(E)	VH733150
b. I like activities that challenge my thinking abilities.	(A)	(B)	(C)	(D)	(E)	VH733151
c. I enjoy situations where I will have to think about something.	(A)	(B)	(C)	(D)	(E)	VH733155
d. I enjoy thinking about new solutions to problems.	(A)	(B)	(C)	(D)	(E)	VH733154

Pilot

4. In this school year, how often have you felt any of the following ways about your school? Select **one** answer choice on each row.

	Never or hardly ever	Less than half of the time	About half of the time	More than half of the time	All or almost all of the time	
a. I felt awkward and out of place at school.	(A)	(B)	(C)	(D)	(E)	VH271942
b. I felt happy at school.	(A)	(B)	(C)	(D)	(E)	VH271944
c. I felt that I learned something that I can use in my daily life.	(A)	(B)	(C)	(D)	(E)	VH336903
d. I worried about crime and violence at my school.	(A)	(B)	(C)	(D)	(E)	VH271940
e. I felt my teachers treated me fairly.	(A)	(B)	(C)	(D)	(E)	VH853117
f. I felt safe on my way to or from school.	(A)	(B)	(C)	(D)	(E)	VH853118

5. For school this year, how often have you been asked to write long answers (several sentences or paragraphs) to questions on tests or assignments that involved math?

- (A) Never
- (B) Once
- (C) Two or three times
- (D) Four or five times
- (E) More than five times

6. Thinking about math, do you think that you would be able to do each of the following? Do not actually solve the problems. Select **one** answer choice on each row.

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. Find the amount of carpet needed to cover a rectangular floor if you know its length and width	(A)	(B)	(C)	(D)	(E)	VH267682
b. Determine a 20% tip of a \$55 restaurant dinner bill	(A)	(B)	(C)	(D)	(E)	VH853690
c. List all of the different possible outcomes when a coin is flipped three times	(A)	(B)	(C)	(D)	(E)	VH853692
d. Determine the likely number of red faces a cube has if the red face lands up 130 out of 400 times the cube is rolled. The 6 faces of the cube are painted red, yellow, or blue.	(A)	(B)	(C)	(D)	(E)	VH853683
e. Create an expression that represents the average number of miles you run in a week if you run 100 miles in w weeks	(A)	(B)	(C)	(D)	(E)	VH853693
f. Calculate how many cats a pet store has if the ratio of cats to dogs is 5 to 4, and the total number of cats and dogs the store has is 27	(A)	(B)	(C)	(D)	(E)	VH853685
g. Find the total sum of the interior angles of a pentagon with 5 equal sides	(A)	(B)	(C)	(D)	(E)	VH853714
h. Write an equation with a variable to solve a problem (for example, if pizza costs \$2 per slice, then x number of slices can be bought for \$16)	(A)	(B)	(C)	(D)	(E)	VH853713

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7. Thinking about math, do you think that you would be able to do each of the following? Select **one** answer choice on each row.

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. Give an example to show that a math statement is false	(A)	(B)	(C)	(D)	(E)	VH460399
b. Explain to your classmate how you solved a math problem	(A)	(B)	(C)	(D)	(E)	VH460910
c. Use correct mathematical words and symbols when showing your work	(A)	(B)	(C)	(D)	(E)	VH460902

8. In your math class this year, how often have you used the following types of calculators? Select **one** answer choice on each row.

	Never or hardly ever	Less than half of the time	About half of the time	More than half of the time	All or almost all of the time	
a. Basic calculator (for example, four function or scientific)	(A)	(B)	(C)	(D)	(E)	VH853523
b. Graphing calculator	(A)	(B)	(C)	(D)	(E)	VH266810

9. How much do you enjoy each of the following types of math activities? Select **one** answer choice on each row.

	Enjoy not at all	Enjoy a little bit	Enjoy somewhat	Enjoy quite a bit	Enjoy a lot	
a. Adding, subtracting, multiplying, and dividing fractions	(A)	(B)	(C)	(D)	(E)	VH810635
b. Finding areas of shapes and figures	(A)	(B)	(C)	(D)	(E)	VH853661
c. Solving for probabilities and events (for example, card, coin, marble, and spinner problems)	(A)	(B)	(C)	(D)	(E)	VH853662
d. Solving problems about ratios and rates (for example, if 4 inches of rain fell in 16 hours, how many inches fell in 1 hour?)	(A)	(B)	(C)	(D)	(E)	VH853665
e. Constructing and building different types of graphs (for example, a bar graph or line graph)	(A)	(B)	(C)	(D)	(E)	VH853674
f. Moving geometric figures from one set of points to another (for example, rotating a rectangle 90 degrees)	(A)	(B)	(C)	(D)	(E)	VH853671

10. This school year, how often did the following things happen in your math class? Select **one** answer choice on each row.

	Never or hardly ever	Less than half of the time	About half of the time	More than half of the time	All or almost all of the time	
a. My teacher used computers or other digital devices to show us how to work through math problems.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	VH267416
b. I used the Internet for my math work.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	VH267417
c. My teacher used computers or other digital devices to go on websites or use apps when teaching math to my class.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	VH810476
d. My teacher required us to use computers or other digital devices to go on websites or use apps to complete math assignments.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	VH810477

11. In this school year, how often have you looked online for resources for help with your math assignments?

- A Never
- B About once or twice a year
- C About once or twice a month
- D About once or twice a week
- E Every day or almost every day

12. How often do you use math in everyday life **outside of school**?

- Ⓐ Never
- Ⓑ About once or twice a year
- Ⓒ About once or twice a month
- Ⓓ About once or twice a week
- Ⓔ Every day or almost every day

13. How often do you play digital games (for example, apps, video games, or computer games) **outside of school** that involve math?

- Ⓐ Never
- Ⓑ About once or twice a year
- Ⓒ About once or twice a month
- Ⓓ About once or twice a week
- Ⓔ Every day or almost every day

14. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I want other students to think I am a good math student.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH854117
b. I want to show others that my math schoolwork is easy for me.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH854118
c. I want to look smart in comparison to the other students in my math class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH854119
d. I want to get better math grades than most other students in my class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH854134

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VH853724

15. How often do you receive the following types of help with math schoolwork **outside of school or after school**? Select **one** answer choice on each row.

	Never	About once or twice a year	About once or twice a month	About once or twice a week	Every day or almost every day	
a. Help from a teacher	(A)	(B)	(C)	(D)	(E)	VH853725
b. Help from a tutor	(A)	(B)	(C)	(D)	(E)	VH853726
c. Help from a family member or friend	(A)	(B)	(C)	(D)	(E)	VH853728
d. Help from online resources (for example, websites or apps)	(A)	(B)	(C)	(D)	(E)	VH853729

VH853944

16. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I want to learn as much as possible about math in my class.	(A)	(B)	(C)	(D)	(E)	VH853957
b. I want to master a lot of new math skills in my class.	(A)	(B)	(C)	(D)	(E)	VH853961
c. I want to become a better math student this year.	(A)	(B)	(C)	(D)	(E)	VH853949
d. I want to understand as much as I can in my math class.	(A)	(B)	(C)	(D)	(E)	VH853952

VH853732

17. How useful do you find each of the following types of help to understand your math schoolwork? Select **one** answer choice on each row.

	Not useful at all	Somewhat useful	Very useful	I don't receive that type of help.	
a. Help from a teacher	(A)	(B)	(C)	(D)	VH853733
b. Help from a tutor	(A)	(B)	(C)	(D)	VH853734
c. Help from a family member or friend	(A)	(B)	(C)	(D)	VH853736
d. Help from online resources (for example, websites or apps)	(A)	(B)	(C)	(D)	VH853737

VH854028

18. How much does each of the following statements describe you? Select **one** answer choice on each row.

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Exactly like me	
a. I enjoy doing math.	(A)	(B)	(C)	(D)	(E)	VH854029
b. I look forward to my math class.	(A)	(B)	(C)	(D)	(E)	VH854030
c. I am interested in the things I learn in math.	(A)	(B)	(C)	(D)	(E)	VH854034
d. I think making an effort in math is worthwhile.	(A)	(B)	(C)	(D)	(E)	VH854031
e. I think math will help me even when I am not in school.	(A)	(B)	(C)	(D)	(E)	VH854036
f. I think it is important to do well in math.	(A)	(B)	(C)	(D)	(E)	VH854033

VH336085

19. Have you ever helped your friends with their math homework?

- (A) Yes
(B) No

20. Over the past seven days, how many days have you helped your friends with their math homework? Enter the number of days.

21. How often do you participate in each of the following activities **outside of school**? Select **one** answer choice on each row.

	Never	About once or twice a year	About once or twice a month	About once or twice a week	Every day or almost every day	
a. Talk about math problems with your friends	(A)	(B)	(C)	(D)	(E)	VH268946
b. Write a computer program	(A)	(B)	(C)	(D)	(E)	VH858371
c. Play an instrument and read music	(A)	(B)	(C)	(D)	(E)	VH268961
d. Go to websites for help with your math homework	(A)	(B)	(C)	(D)	(E)	VH268962

22. Have you ever participated in a math study group **outside of school**?

(A) Yes

(B) No

23. Over the past seven days, how many days have you participated in a math study group **outside of school**? Enter the number of days.