



Mathematics Student Questionnaire

2019
Grade 12

1. How easy or difficult was this test?

- Ⓐ Extremely difficult
- Ⓑ Quite difficult
- Ⓒ Somewhat difficult
- Ⓓ Somewhat easy
- Ⓔ Quite easy
- Ⓕ Extremely easy

2. How much effort did you apply to succeed on this test?

- Ⓐ No effort at all
- Ⓑ Very little effort
- Ⓒ Some effort
- Ⓓ Quite a bit of effort
- Ⓔ A lot of effort

3. Are you Hispanic or Latino? Select **one or more** answer choices.

- Ⓐ No, I am not Hispanic or Latino.
- Ⓑ Yes, I am Mexican, Mexican American, or Chicano.
- Ⓒ Yes, I am Puerto Rican or Puerto Rican American.
- Ⓓ Yes, I am Cuban or Cuban American.
- Ⓔ Yes, I am from some other Hispanic or Latino background.

4. Which of the following best describes you? Select **one or more** answer choices.

- Ⓐ White
- Ⓑ Black or African American
- Ⓒ Asian
- Ⓓ American Indian or Alaska Native
- Ⓔ Native Hawaiian or other Pacific Islander

5. About how many books are there in your home?

- Ⓐ Few (0–10)
- Ⓑ Enough to fill one shelf (11–25)
- Ⓒ Enough to fill one bookcase (26–100)
- Ⓓ Enough to fill several bookcases (more than 100)

VH271104

6. Do you have any of the following in your home? Select **one** answer choice on each row.

	Yes	No	
a. Access to the Internet	<input type="radio"/> A	<input type="radio"/> B	VH271105
b. Your own bedroom	<input type="radio"/> A	<input type="radio"/> B	VH336762
c. A desktop or laptop computer (including Chromebooks) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH591976
d. A tablet (for example, Surface Pro, iPad, Kindle Fire) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH271110
e. A smartphone (for example, iPhone, Samsung Galaxy, HTC One) that you can use	<input type="radio"/> A	<input type="radio"/> B	VH271112

VH354591

7. How often do you use the Internet for homework at home?

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

VH240190

8. How many days were you absent from school in the last month?

- A None
- B 1 or 2 days
- C 3 or 4 days
- D 5 to 10 days
- E More than 10 days

9. How often do you talk about things you have studied in school with someone in your family?

- Ⓐ Never or hardly ever
- Ⓑ Once every few weeks
- Ⓒ About once a week
- Ⓓ Two or three times a week
- Ⓔ Every day

10. How far in school did **your mother** go?

- Ⓐ She did not finish high school.
- Ⓑ She graduated from high school.
- Ⓒ She had some education after high school.
- Ⓓ She graduated from college.
- Ⓔ I don't know.

11. How far in school did **your father** go?

- Ⓐ He did not finish high school.
- Ⓑ He graduated from high school.
- Ⓒ He had some education after high school.
- Ⓓ He graduated from college.
- Ⓔ I don't know.

VH336776

12. Does **your mother** work?

- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.

VH336779

13. Does **your father** work?

- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.

VH271144

14. Do any of the following people live in your home? Select **one** answer choice on each row.

	Yes	No	
a. Mother	<input type="radio"/> A	<input type="radio"/> B	VH271145
b. Stepmother	<input type="radio"/> A	<input type="radio"/> B	VH271146
c. Foster mother or other female legal guardian	<input type="radio"/> A	<input type="radio"/> B	VH271147
d. Father	<input type="radio"/> A	<input type="radio"/> B	VH271148
e. Stepfather	<input type="radio"/> A	<input type="radio"/> B	VH271149
f. Foster father or other male legal guardian	<input type="radio"/> A	<input type="radio"/> B	VH271150

VH591969

15. In this school year, how often did you use a **laptop or desktop computer** (including Chromebooks) during your classes at school?

- A Never
- B In some classes
- C In about half of the classes
- D In more than half of the classes
- E In all or almost all classes

VH271276

16. In this school year, how often did you use a **tablet** (for example, Surface Pro, iPad, Kindle Fire) during your classes at school?

- A Never
- B In some classes
- C In about half of the classes
- D In more than half of the classes
- E In all or almost all classes

17. How much does each of the following statements describe you? Select **one** answer choice on each row. ¹

	Not at all like me	A little bit like me	Somewhat like me	Quite a bit like me	Very much like me	
a. I finish whatever I begin.	(A)	(B)	(C)	(D)	(E)	VH733142
b. I try very hard even after making mistakes.	(A)	(B)	(C)	(D)	(E)	VH733143
c. I keep working hard even when I feel like quitting.	(A)	(B)	(C)	(D)	(E)	VH733145
d. I keep trying to improve myself, even when it takes a long time to get there.	(A)	(B)	(C)	(D)	(E)	VH733144

18. How much does each of the following statements describe you? Select **one** answer choice on each row. ²

	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

¹ Items 17a-17d are used to create the Students' Persistence in Learning index (NAEPID for index: SQCATM4; NAEPIDs for index items: B034901, B034902, B034903, B034904).

² Items 18a-18d are used to create the Students' Enjoyment of Complex Problems index (NAEPID for index: SQCATM6; NAEPIDs for index items: B035101, B035102, B035103, B035104).

19. In this school year, how often have you done each of the following? Select **one** answer choice on each row. **3**

	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 started working on assignments right away rather than waiting until the last minute.	(A)	(B)	(C)	(D)	(E)	VH271370
b. I paid attention and resisted distractions.	(A)	(B)	(C)	(D)	(E)	VH271372
c. I stayed on task without reminders from my teacher.	(A)	(B)	(C)	(D)	(E)	VH271374
d. I paid attention in class even when I was not interested.	(A)	(B)	(C)	(D)	(E)	VH271375

20. 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

21. Are you taking an art course this school year (for example, drawing, painting, or studio art)?

- (A) Yes
- (B) No

³ Items 19a-19d are used to create the Students' Academic Self-Discipline index (NAEPID for index: SQCATM5; NAEPIDs for index items: B035001, B035002, B035003, B035004).

22. During this school year, which of the following have you done? Select **one** answer on each row.

	Yes	No	
a. Taken the SAT or ACT College Entrance Exams	<input type="radio"/> A	<input type="radio"/> B	VH740702
b. Submitted the Free Application for Federal Student Aid (FAFSA)	<input type="radio"/> A	<input type="radio"/> B	VH740703
c. Applied to a 2-year college	<input type="radio"/> A	<input type="radio"/> B	VH740704
d. Been accepted to a 2-year college	<input type="radio"/> A	<input type="radio"/> B	VH740705
e. Applied to a 4-year college	<input type="radio"/> A	<input type="radio"/> B	VH740706
f. Been accepted to a 4-year college	<input type="radio"/> A	<input type="radio"/> B	VH740708
g. Applied to a certificate or diploma program at a school that provides occupational training (such as electrician, beautician, mechanic, computer programmer, etc.)	<input type="radio"/> A	<input type="radio"/> B	VH740709
h. Been accepted to a technical training program	<input type="radio"/> A	<input type="radio"/> B	VH740710
i. Talked with a military recruiter	<input type="radio"/> A	<input type="radio"/> B	VH740711
j. Enlisted in the military	<input type="radio"/> A	<input type="radio"/> B	VH740712
k. Applied for a full-time job	<input type="radio"/> A	<input type="radio"/> B	VH740713
l. Been interviewed for a full-time job	<input type="radio"/> A	<input type="radio"/> B	VH740714

23. Which of the following best describes your high school program?

- A General
- B Academic or college preparatory
- C Vocational or technical

24. Which courses have you taken from eighth grade to the present? If you have taken a course more than once, give the **most recent** year you took it. **INCLUDE** courses taken in summer school, but **DO NOT INCLUDE** topics that were only taught as part of a longer course (such as trigonometry taught in drafting class or computer programming taught in Algebra II). Select **one** answer choice on each row.

	I have never taken this course.	I took this course in or before Grade 8.	I took this course in Grade 9.	I took this course in Grade 10.	I took this course in Grade 11.	I took this course in Grade 12.	
a. Basic or general mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VH240820
b. Tech-prep mathematics, business mathematics, consumer mathematics, or other applied mathematics course	(A)	(B)	(C)	(D)	(E)	(F)	VH240844
c. Introduction to algebra or pre-algebra course	(A)	(B)	(C)	(D)	(E)	(F)	VH240822
d. Algebra I course	(A)	(B)	(C)	(D)	(E)	(F)	VH240823
e. Geometry course	(A)	(B)	(C)	(D)	(E)	(F)	VH240824
f. Algebra II course, with or without trigonometry	(A)	(B)	(C)	(D)	(E)	(F)	VH240825
g. Trigonometry (as a separate course)	(A)	(B)	(C)	(D)	(E)	(F)	VH240826
h. Pre-calculus course (also called introductory analysis)	(A)	(B)	(C)	(D)	(E)	(F)	VH240833
i. Integrated mathematics 1 (first year of a multi-year course)	(A)	(B)	(C)	(D)	(E)	(F)	VH240841
j. Integrated mathematics 2 (second year of a multi-year course)	(A)	(B)	(C)	(D)	(E)	(F)	VH240842
k. Integrated mathematics 3 (third year of a multi-year course)	(A)	(B)	(C)	(D)	(E)	(F)	VH240843

	I have never taken this course.	I took this course in or before Grade 8.	I took this course in Grade 9.	I took this course in Grade 10.	I took this course in Grade 11.	I took this course in Grade 12.	
l. Integrated mathematics 4 (fourth year of a multi-year course)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	VH240821
m. Probability or statistics course	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	VH240836
n. Calculus course	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	VH240829
o. Computer programming course (such as C++, Visual Basic, etc.)	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	VH240835

VH250444

25. Are you currently enrolled in or have you taken any of the following Advanced Placement (AP[®]) courses? Select **all** that apply.

- Ⓐ Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus AB.
- Ⓑ Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus BC.
- Ⓒ Yes, I am enrolled in or have taken Advanced Placement (AP) Statistics.
- Ⓓ No, I have not taken any of the courses listed above.

VH240048

26. Are you currently enrolled in or have you taken an International Baccalaureate[®] (IB) mathematics course?

- Ⓐ Yes
- Ⓑ No

VH240049

27. Are you currently enrolled in or have you taken any **online** mathematics courses for **high school or college credit**?

- Ⓐ Yes
- Ⓑ No

VH240050

28. Was there a mathematics course that you would have liked to have taken this school year but did not take?

- Ⓐ Yes, but my school does not offer the course.
- Ⓑ Yes, but the course was full.
- Ⓒ Yes, but I did not have the necessary prerequisites.
- Ⓓ Yes, but my schedule was full.
- Ⓔ No, there was no other course that I wanted to take.

VH240051

29. Are you currently taking a mathematics course?

- Ⓐ Yes
- Ⓑ No

VH350115

30. 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?

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

VH266808

31. 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	(A)	(B)	(C)	(D)	(E)	VH266809
b. Graphing calculator	(A)	(B)	(C)	(D)	(E)	VH266810

VH589166

32. 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.	(A)	(B)	(C)	(D)	(E)	VH267416
b. I used the Internet for my math work.	(A)	(B)	(C)	(D)	(E)	VH267417
c. My teacher used computers or other digital devices when teaching math to my class.	(A)	(B)	(C)	(D)	(E)	VH588077
d. My teacher required us to use computers or other digital devices to complete math assignments.	(A)	(B)	(C)	(D)	(E)	VH267419

33. In this school year, how often have you used a computer or other digital device (excluding handheld calculators) to look online for resources for help with your math assignments?

- Ⓐ 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

34. How much does each of the following statements describe you? Select **one** answer choice on each row.⁴

	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 good at math.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH844871
b. I want to show others that my math schoolwork is easy for me.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH844872
c. I want to look smart in comparison to the other students in my math class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH844873
d. I want to get better grades than most other students in my math class.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH844882

⁴ Items 34a-34d are used to create the Students' Mathematics Performance Goals index (NAEPID for index: SQCATM9; NAEPIDs for index items: M831501, M831502, M831503, M834004).

35. How much does each of the following statements describe you? Select **one** answer choice on each row.⁵

	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 in my math class.	(A)	(B)	(C)	(D)	(E)	VH845117
b. I want to master a lot of new skills in my math class.	(A)	(B)	(C)	(D)	(E)	VH845114
c. I want to become better in math this year.	(A)	(B)	(C)	(D)	(E)	VH845115
d. I want to understand as much as I can in my math class.	(A)	(B)	(C)	(D)	(E)	VH845118

36. 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.⁶

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. 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)	VH460383
b. Determine a 20 percent tip of a 67-dollar restaurant dinner bill	(A)	(B)	(C)	(D)	(E)	VH267679
c. Describe the properties shared by every isosceles right triangle	(A)	(B)	(C)	(D)	(E)	VH267681

5. Items 35a-35d are used to create the Students' Mathematics Mastery Goals index (NAEPID for index: SQCTM10; NAEPIDs for index items: M831504, M834102, M831505, M831506).

6. Items 36a-c and 37a-37e are used to create the Students' Confidence in Mathematics Knowledge/Skills index (NAEPID: SQCATM7; NAEPIDs for index items: M831408, M831403, M831404, M831412, M831409, M831410, M831411, M831413).

37. Thinking about math, do you think that you would be able to do each of the following? Select **one** answer choice on each row.⁶

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can	
a. Decide if your classmate's math work is correct	(A)	(B)	(C)	(D)	(E)	VH460398
b. Give an example to show that a math statement is false	(A)	(B)	(C)	(D)	(E)	VH460399
c. Explain to your classmate how you solved a math problem	(A)	(B)	(C)	(D)	(E)	VH460910
d. Use correct mathematical words and symbols when showing your work	(A)	(B)	(C)	(D)	(E)	VH460902
e. Use definitions of geometric shapes to support an argument	(A)	(B)	(C)	(D)	(E)	VH460912

38. 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. Solving equations or simplifying expressions	(A)	(B)	(C)	(D)	(E)	VH860653
b. Constructing and building different types of graphs (for example, bar graph, line graph, or box and whisker plots)	(A)	(B)	(C)	(D)	(E)	VH860651
c. Working with geometric figures like rectangles and squares	(A)	(B)	(C)	(D)	(E)	VH860652

39. 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

40. 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

41. 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	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH268946
b. Program computers	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH268949
c. Play an instrument and read music	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH268961
d. Go to websites for help with your math homework	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	VH268962

VH336233

42. How often do you receive help or tutoring with math **outside of school or after 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

VH336085

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

- Ⓐ Yes
- Ⓑ No

VH269037

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

VH460923

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

- Ⓐ Yes
- Ⓑ No

VH460925

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

47. How much does each of the following statements describe you? Select **one** answer choice on each row.⁷

	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)	VH731853
b. I look forward to my math class.	(A)	(B)	(C)	(D)	(E)	VH731854
c. I am interested in the things I learn in math.	(A)	(B)	(C)	(D)	(E)	VH731858
d. I think making an effort in math is worthwhile.	(A)	(B)	(C)	(D)	(E)	VH731855
e. I think math will help me even when I am not in school.	(A)	(B)	(C)	(D)	(E)	VH731860
f. I think it is important to do well in math.	(A)	(B)	(C)	(D)	(E)	VH731857
g. I take mathematics because it will help me in the future.	(A)	(B)	(C)	(D)	(E)	VH731859
h. I take mathematics to meet my high school graduation requirements.	(A)	(B)	(C)	(D)	(E)	VH731856

⁷ Items 47a-47g are used to create the Students' Interest/Enjoyment in Mathematics index (NAEPID: SQCATM8; NAEPIDs for index items: M831901, M831902, M831903, M831904, M831905, M831906, M831907).