

NATIONAL ASSESSMENT OF EDUCATIONAL

PROGRESS

## Mathematics Student Questionnaire

Grade 12

1. How easy or difficult was this test?
(A) Extremely difficult
(B) Quite difficult
© Somewhat difficult
(D) Somewhat easy
(©) Quite easy
© Extremely easy
2. How much effort did you apply to succeed on this test?
(A) No effort at all
(B) Very little effort
© Some effort
(D) Quite a bit of effort
(E) A lot of effort
3. Are you Hispanic or Latino? Select one or more answer choices.
(A) No, I am not Hispanic or Latino.
(B) Yes, I am Mexican, Mexican American, or Chicano.
© Yes, I am Puerto Rican or Puerto Rican American.
(D) 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.
(A) White
(B) Black or African American
© Asian
(D) American Indian or Alaska Native
(E) Native Hawaiian or other Pacific Islander
5. About how many books are there in your home?
(4) Few (0-10)
(B) Enough to fill one shelf (11-25)
© Enough to fill one bookcase 26-100
(D) Enough to fill several bookcases (more than 100)
6. Do you have any of the following in your home? Select one answer choice on each row.
a. Access to the Internet
b. Your own bedroom

| Yes | No |  |
| :--- | :--- | :--- |
| (4) | © | vH271105 |
| (4) | © | vH336762 |
| (4) | (B) | vH591976 |
| (4) | (®) | vH271110 |
| (4) | © | vH271112 |

7. How often do you use the Internet for homework at home?
(4) Never
(B) About once or twice a month
© About once or twice a week
(D) Almost every day
(E) Every day
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?
(A) Never or hardly ever
(B) Once every few weeks
© About once a week
(D) Two or three times a week
(E) Every day
10. How far in school did your mother go?
(A) She did not finish high school.
(B) She graduated from high school.
© She had some education after high school.
(D) She graduated from college.
(E) I don't know.
11. How far in school did your father go?
(A) He did not finish high school.
(B) He graduated from high school.
© He had some education after high school.
(D) He graduated from college.
(ㄹ) I don't know.
12. Does your mother work?
(A) Yes
(B) No
© I don't know.
13. Does your father work?
(A) Yes
(B) No
© I don't know.
14. Do any of the following people live in your home? Select one answer choice on each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Mother | (4) | (8) | vH271145 |
| b. Stepmother | (4) | (B) | vH271146 |
| c. Foster mother or other female legal guardian | (1) | (B) | vH271147 |
| d. Father | (4) | (B) | vH271148 |
| e. Stepfather | (1) | (B) | vH271149 |
| f. Foster father or other male legal guardian | (4) | (8) | vH271150 |

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
© In about half of the classes
(D) In more than half of the classes
© In all or almost all classes
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
© In about half of the classes
(D) In more than half of the classes
(®) In all or almost all classes
17. Are you taking an art course this school year (for example, drawing, painting, or studio art)?
(A) Yes
(B) No
18. During this school year, which of the following have you done? Select one answer choice on each row.

|  | Yes | No |  |
| :---: | :---: | :---: | :---: |
| a. Taken the SAT or ACT College Entrance Exams | (4) | (B) | vH740702 |
| b. Submitted the Free Application for Federal Student Aid (FAFSA) | (4) | (8) | vH740703 |
| c. Applied to a 2-year college | (4) | (8) | VH740704 |
| d. Been accepted to a 2-year college | (4) | (8) | vH740705 |
| e. Applied to a 4-year college | (4) | (B) | VH740706 |
| f. Been accepted to a 4-year college | (4) | (8) | vH740708 |
| g. Applied to a certificate or diploma program at a school that provides occupational training (such as electrician, beautician, mechanic, computer programmer, etc.) | (4) | © | vH740709 |
| h. Been accepted to a technical training program | (4) | (8) | vH740710 |
| i. Talked with a military recruiter | (4) | (8) | vH740711 |
| j. Enlisted in the military | (4) | (B) | vH740712 |
| k. Applied for a full-time job | (4) | (B) | vH740713 |
| 1. Been interviewed for a full-time job | (4) | (B) | vH740714 |

19. Which of the following best describes your high school program?
(A) General
(B) Academic or college preparatory
© Vocational or technical
20. Thinking about this school year, do you think you can do each of the following? Select one answer choice on each row.

|  | $\begin{gathered} \text { I definitely } \\ \text { can't } \end{gathered}$ | $\begin{gathered} \text { I probably } \\ \text { can't } \end{gathered}$ | Maybe | $\begin{gathered} \text { I probably } \\ \text { can } \end{gathered}$ | $\begin{gathered} \text { I definitely } \\ \text { can } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Learn what you need to learn in your mathematics class | (4) | (B) | © | (1) | (E) | VR740540 |
| b. Know how to get the help you need for your mathematics class | (4) | (B) | © | (1) | (E) | VR740541 |

21. Did you receive any tutoring in mathematics this school year?
(4) Yes
(B) No
22. To what extent did your mathematics tutor make it easier for you to understand what you were learning?
(A) Not at all
(B) A little bit
© Somewhat
(D) Quite a bit
(E) A lot
23. How easy was it for you to understand the material in your mathematics tutoring sessions?
(A) Not at all easy
(B) A little easy
(c) Somewhat easy
(D) Very easy
(©) Extremely easy
24. 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 finish whatever I begin. | (1) | (B) | © | (1) | (1) | VH733142 |
| b. I try very hard even after making mistakes. | (1) | (B) | $\bigcirc$ | (1) | (1) | vH733143 |
| c. I keep working hard even when I feel like quitting. | (4) | (B) | $\bigcirc$ | (1) | (1) | vH733145 |
| d. I keep trying to improve myself, even when it takes a long time to get there. | (4) | (B) | © | (1) | (1) | vH73314 |

25. 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. | (4) | (B) | © | (1) | (1) | vH733150 |
| b. I like activities that challenge my thinking abilities. | (1) | (B) | © | (1) | (c) | vH733151 |
| c. I enjoy situations where I will have to think about something. | (4) | (B) | © | (1) | (1) | vH733155 |
| d. I enjoy thinking about new solutions to problems. | (4) | (8) | © | (1) | (1) | vH733154 |

26. 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. | (4) | (B) | © | (1) | (E) | VH271942 |
| b. I felt happy at school. | (4) | © | $\bigcirc$ | (1) | (1) | VH271944 |
| c. I felt that I learned something that I can use in my daily life. | (4) | (B) | © | (1) | (E) | vH336003 |

27. How much does each of the following statements describe the teachers at your school this year? Select one answer choice on each row.

|  | Not at all like the teachers at my school | A little bit like the teachers at my school | Quite a bit like the teachers at my school | Exactly like the teachers at my school |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a. Teachers care about the students. | (1) | (8) | © | (1) | vR730781 |
| b. Students feel comfortable talking with their teachers. | (4) | (B) | © | (1) | vR730782 |
| c. Teachers expect students to do well. | (4) | (B) | © | (1) | vR730783 |
| d. Teachers are available when students need them. | (1) | (B) | © | (1) | VR730784 |
| e. Teachers try to understand students' problems. | (4) | (B) | © | (1) | VR730785 |
| f. Teachers notice if I need help. | (4) | (B) | © | (1) | vR730786 |
| g. Teachers treat all students respectfully. | (4) | (B) | © | (1) | vR730787 |

28. 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 | (1) | (B) | © | (1) | © | (1) | vH240820 |
| b. Tech-prep mathematics, business mathematics, consumer mathematics, or other applied mathematics course | (1) | (B) | © | (1) | (c) | © | vH24084 |
| c. Introduction to algebra or pre-algebra course | (1) | (B) | © | (1) | (1) | © | vH240822 |
| d. Algebra I course | (4) | (8) | $\bigcirc$ | (1) | © | © | VH240823 |
| e. Geometry course | (4) | (8) | $\bigcirc$ | © | © | © | VH240824 |
| f. Algebra II course, with or without trigonometry | (4) | (B) | © | (1) | (e) | © | vH240825 |
| g. Trigonometry (as a separate course) | (1) | (B) | © | (1) | (1) | (1) | vH240826 |
| h. Pre-calculus course (also called introductory analysis) | (1) | (B) | © | (1) | (1) | (1) | vH200833 |
| i. Integrated mathematics 1 (first year of a multi-year course) | (1) | (8) | © | © | (®) | © | vH240841 |
| j. Integrated mathematics 2 (second year of a multi-year course) | (1) | (B) | © | © | (1) | © | vH240842 |
| k. Integrated mathematics 3 (third year of a multi-year course) | (1) | (B) | © | © | © | © | vH200843 |


|  | 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. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Integrated mathematics 4 (fourth year of a multi-year course) | (4) | (B) | © | (1) | (1) | (1) | VH240821 |
| m. Probability or statistics course | (4) | (B) | © | (1) | (1) | (1) | VH240836 |
| n. Calculus course | (4) | (8) | © | (1) | (E) | (1) | VH240829 |
| o. Computer programming course (such as C++, Visual Basic, etc.) | (4) | (B) | © | (1) | (E) | © | VH240835 |

29. Are you currently enrolled in or have you taken any of the following Advanced Placement (AP ${ }^{\circledR}$ ) courses? Select all that apply.
(A) Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus AB.
(B) 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.
(D) No, I have not taken any of the courses listed above.
30. Are you currently enrolled in or have you taken an International Baccalaureate ${ }^{\circledR}$
(IB) mathematics course?
(A) Yes
(B) No
31. Are you currently enrolled in or have you taken any online mathematics courses for high school or college credit?
(4) Yes
(B) No
32. Was there a mathematics course that you would have liked to have taken this school year but did not take?
(A) Yes, but my school does not offer the course.
(B) Yes, but the course was full.
© Yes, but I did not have the necessary prerequisites.
(D) Yes, but my schedule was full.
(©) No, there was no other course that I wanted to take.
33. Are you currently taking a mathematics course?
(A) Yes
(B) No
34. 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?
(4) Never
(B) Once
© Two or three times
(D) Four or five times
(®) More than five times
35. 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 | (4) | (8) | © | (1) | (1) | VH266809 |
| b. Scientific (not graphing) calculator | (4) | (B) | $\bigcirc$ | (1) | (E) | VR191495 |
| c. Graphing calculator | (4) | (8) | © | (1) | (1) | vH268810 |

36. 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?
(4) Never
(B) About once or twice a year
© About once or twice a month
(D) About once or twice a week
(B) Every day or almost every day
37. 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 in my math class. | (4) | (B) | $\bigcirc$ | (1) | (E) | VH845117 |
| b. I want to master a lot of new skills in my math class. | (4) | (B) | $\bigcirc$ | (1) | (E) | VH845114 |
| c. I want to become better in math this year. | (4) | (B) | © | (1) | © | VH845115 |
| d. I want to understand as much as I can in my math class. | (4) | (B) | © | (1) | © | VH845118 |

38. 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.

|  | $\begin{gathered} \text { I definitely } \\ \text { can't } \end{gathered}$ | $\begin{gathered} \text { I probably } \\ \text { can't } \end{gathered}$ | Maybe | $\begin{gathered} \text { I probably } \\ \text { can } \end{gathered}$ | $\begin{gathered} \text { I definitely } \\ \text { can } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Create an expression that represents the average number of miles you run in a week if you run 100 miles in $W$ weeks | (4) | (B) | © | (1) | (E) | vH460383 |
| b. Determine a 20 percent tip of a 67-dollar restaurant dinner bill | (4) | (B) | © | (1) | (E) | vH267679 |
| c. Describe the properties shared by every isosceles right triangle | (4) | (B) | © | (1) | (1) | vH267681 |

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

|  | $\begin{gathered} \text { I definitely } \\ \text { can't } \end{gathered}$ | $\underset{\text { can't }}{\text { I probably }}$ | Maybe | $\begin{gathered} \text { I probably } \\ \text { can } \end{gathered}$ | $\begin{gathered} \text { I definitely } \\ \text { can } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a. Decide if your classmate's math work is correct | (4) | (B) | © | (1) | (c) | VH460398 |
| b. Give an example to show that a math statement is false | (4) | (B) | © | (1) | (1) | vH460399 |
| c. Explain to your classmate how you solved a math problem | (4) | (B) | © | (1) | (1) | VH460910 |
| d. Use correct mathematical words and symbols when showing your work | (4) | (B) | © | © | (1) | VH460902 |
| e. Use definitions of geometric shapes to support an argument | (4) | (B) | © | (1) | (1) | VH460912 |

40. 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. | (4) | (B) | $\bigcirc$ | (1) | (1) | VH731853 |
| b. I look forward to my math class. | (4) | (B) | © | (1) | (e) | VH731854 |
| c. I am interested in the things I learn in math. | (1) | (B) | © | (1) | (1) | vH731858 |
| d. I think making an effort in math is worthwhile. | (4) | (8) | © | (1) | © | vH731855 |
| e. I think math will help me even when I am not in school. | (4) | (B) | © | (1) | (e) | vH731860 |
| f. I think it is important to do well in math. | (4) | (B) | © | (1) | (c) | vH731857 |
| g. I take mathematics because it will help me in the future. | (4) | (B) | © | (1) | (c) | vH731859 |
| h. I take mathematics to meet my high school graduation requirements. | (4) | © | © | (1) | (1) | vH731856 |

41. 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 | (4) | (B) | © | (1) | (1) | VH860653 |
| b. Constructing and building different types of graphs (for example, bar graph, line graph, or box and whisker plots) | (4) | © | © | (1) | (c) | vH860651 |
| c. Working with geometric figures like rectangles and squares | (4) | (B) | © | (1) | (1) | VH860652 |

42. How often do you use math in everyday life outside of school?
(4) Never
(B) About once or twice a year
© About once or twice a month
(D) About once or twice a week
(®) Every day or almost every day
