
Grade 6 Subject Bulletin Mathematics

Alberta Provincial Achievement Testing **2025-2026**

This document was written primarily for

Students

Teachers ✓ Grade 6 Mathematics

Administrators ✓

Parents

General Audience

2025-2026 Mathematics 6 Subject Bulletin

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Grade 6 Mathematics Provincial Achievement Test

General description

The *Grade 6 Mathematics Provincial Achievement Test* is organized into two parts:

- **Part A** consists of 15 questions from *Organizing Idea: Number* in two reporting categories: integers, decimals, and powers; and fractions, rates, and ratios. The questions will be in various formats supported by the digital assessment platform, each worth one mark. The test is designed to be completed in 30 minutes; however, students may have up to 60 minutes to complete the test should they need it.
- **Part B** consists of 40 questions of various formats supported by the digital assessment platform, each worth one mark, from all organizing ideas in the Grade 6 mathematics curriculum. The questions will be in various formats supported by the digital assessment platform. The test is designed to be completed in 75 minutes; however, students may have up to 150 minutes to complete the test should they need it.

Questions are categorized according to three levels of complexity: low, moderate, and high. (See Appendix 1 for a detailed explanation of each complexity level.)

The use of a calculator is **not** permitted in *Part A* or *Part B*.

A dictionary, a thesaurus, or other reference materials are **not** permitted for students writing the test.

Any *Written-response bilingual blank paper* needed for rough work must be provided to students by the supervisor and collected by the supervisor at the end of the provincial achievement test administration and securely shredded. The *Multiplication Chart – 12 x 12* used as a regular accommodation is provided in the digital assessment platform. These documents can be found in the Key Educator Resources heading on the [Provincial Achievement Tests](#) webpage.

It is important to remember that one test cannot measure all the components within the learning outcomes in the Mathematics curriculum.

Use of calculators and manipulatives

Both *Part A* and *Part B* of the *Grade 6 Mathematics Provincial Achievement Test* must be completed **without** the use of a calculator.

***NEW** *Part A* and *Part B* allows a 12x12 multiplication table as a regular accommodation. If a student requires the use of a calculator to complete *Part A* and *Part B*, the student should be excused from the provincial achievement test.

Manipulatives may be used on *Part A* and *Part B*. An acceptable manipulative is any mathematical tool that can be used by a student to help convert abstract ideas into concrete representations for the purpose of solving a problem (e.g., a protractor, a ruler, tracing paper, pattern blocks, tiles and cubes, geoboards, tangrams, counters, spinners, number lines, graph paper). The manipulative cannot perform the mental conversion or provide the solution to a problem.

Scoring and reporting

Test scores will be available after students submit their tests on the digital assessment platform. Teachers are expected to record and report the raw scores achieved on the test by their students to parents. Raw scores achieved by students on *Part A* and *Part B* are to be reported separately to parents and are not to be combined into a total test score.

Blueprints

Test Components	Number of Questions	Weighting on Total Test
<i>Part A</i>	15	20%
<i>Part B</i>	40	80%

Reporting Categories	<i>Part A:</i> Percentage of Questions	<i>Part B:</i> Percentage of Questions
Number: Integers, Decimals, and Powers	100%	20–30%
Number: Fractions, Rates, and Ratios		20–30%
Algebra and Patterns		20–30%
Geometry and Coordinate Geometry		5–15%
Measurement and Statistics		10–20%

Complexity Level	<i>Part A:</i> Percentage of Questions	<i>Part B:</i> Percentage of Questions
Low	100%	30–40%
Moderate		45–55%
High		10–20%

Preparing Students for the *Grade 6 Mathematics Provincial Achievement Test*

Suggestions for preparing students

The best way to prepare students for writing the provincial achievement test is to teach the Mathematics curriculum well and to ensure that students know what is expected. Many of the skills and attitudes that support test writing are, in fact, good skills and strategies for approaching all kinds of learning tasks.

Note that many of the questions on the mathematics test are placed in real-life contexts.

[Practice tests](#) are available on the digital assessment platform. These practice tests include accommodations such as text-to-speech, coloured backgrounds, and a zoom feature for increasing the size of the font.

Special-format practice tests

To give students an opportunity to practice provincial achievement test-style questions and content in Braille, large print, or coloured print versions, Alberta Education and Childcare produces special-format practice tests for all subjects that have a provincial achievement test. Alberta schools with registered Alberta K–12 students may place orders for these tests. Braille versions are available in English and, by request, in French. All tests are provided free of charge, but limits may be placed on order volumes to ensure access for all students.

For the greatest benefit, special-format practice tests should be written under conditions similar to those of the corresponding provincial achievement test. The same rules regarding the use of resources and devices should be followed.

Braille versions must be returned to Alberta Education and Childcare after use.

More information about special format practice tests can be found in the *General Information Bulletin*. To order special format practice tests, complete this [form](#).

Suggestions for answering questions

- Before you begin, find out how much time you have.
- Ask questions if you are unsure of anything.
- Skim through the whole test before beginning. Find out how many questions there are, and plan your time accordingly.
- Answer the easier questions first; then go back to the more difficult ones.
- Do not spend too much time on any one question. Flag any questions that you have difficulty with, and go back to them if you have time.
- Read each question carefully, underline or highlight key words, and try to determine an answer before looking at the choices.
- Read all the choices and see which one best fits the answer.
- When you are not sure which answer is correct, eliminate any choices that are wrong and then select the best of the remaining choices.
- If time permits, recheck your answers.
- Double-check to make sure that you have answered all questions before submitting the test.
- Read the information given using the strategy that works best for you. You should either
 - look at all the information and think carefully about it before you try to answer the question

OR

 - read the questions first and then look at the information, keeping in mind the questions you need to answer.
- Make sure that you look at all forms of the information given. Information may be given in words, charts, pictures, graphs, or maps.
- When information is given for more than one question, go back to the information before answering each question.
- Check your work when you calculate an answer, even when your answer is one of the choices.
- When answering “best answer” questions, be sure to carefully read all choices before selecting the answer that you think is best. These questions will always include a boldfaced qualifier such as **best**, **most strongly** or **most clearly** in their stems. More than one of the choices may be, to some degree, correct, but one of the choices will be “best” in that it takes more of the information into account or can be supported most strongly by reference to the information.

Opportunities to Participate in Test-development Activities

Field testing

All provincial achievement test questions are field tested before use. Field testing is a critical process in assessment design with the objective of testing the test items before they appear on a provincial assessment. Field testing ensures that Alberta Education and Childcare provincial assessments are fair, reliable, and valid. Teachers and students can be reassured that the items on provincial assessments have undergone a rigorous process of development, improvement, and validation.

Field tests provide benefits for teachers and students by exposing them to examples of the style and content of items that may appear on provincial assessments. Through the field-testing experience, students experience provincial assessment rules and procedures, as well as a conventional large-scale standardized writing environment. This exposure and familiarization have the potential to reduce test anxiety.

Teachers can sign up for field testing on the [digital assessment platform](#). A [user guide](#) to sign up for field testing on the digital platform has been developed to answer any questions you may have.

All of the rules and procedures that are specified in the [General Information Bulletin](#) apply to the administration of field tests. Prior to participating in field testing, school staff will be required to attest to a declaration related to assessment confidentiality.

Detailed information can be found in the [Field Testing Program: Rules and Guide](#).

Working groups

Teacher involvement in the development of provincial achievement tests is important because it helps to ensure the validity and appropriateness of the assessments.

Teacher working groups are used throughout the test-development process to create raw forms of test questions and to review and revise draft forms of provincial achievement tests. These working groups usually meet for one or two days, two or three times per year. Occasionally, these meetings are held on weekends.

To be eligible to serve on a working group, a teacher must currently be teaching the course in question or must have taught the course within the past three years.

Teachers participating in working groups are selected from the working-group nominees approved by superintendents of school authorities. The call for nominations usually occurs in September. However, we will accept further nominations throughout the year. In some subjects, more teachers may be nominated for working groups than are needed. When teachers are selected, there must be a balance of first-time and experienced working-group members and regional representation by zone, school authority, and school. Unfortunately, not everyone whose name is submitted will be selected.

Appendix 1: Levels of Item Complexity

LEVELS OF ITEM COMPLEXITY

Low Complexity

Items in this category require students to rely heavily on recalling and recognizing previously learned concepts and principles. Items typically specify what students are to do, which is often to carry out some procedure that can be performed mechanically. Students would not be expected to come up with original methods for finding a particular solution. The following list illustrates some of the demands that items of low complexity may make of students.

- Recall or recognize a fact, term, or property.
- Recognize an example of a concept.
- Perform a specified procedure.
- Evaluate an expression in an equation or a formula for a single variable.
- Solve a one-step word problem.
- Draw or measure simple 2-D shapes or 3-D objects.
- Retrieve information from a graph, table, or figure.

Moderate Complexity

Items in this category involve more flexibility of thinking and choice among alternatives than those in the low-complexity category. Moderate-complexity items require a response that goes beyond the habitual, is not specified, and may require more than a single step. The student is expected to decide what to do, using informal methods of reasoning and problem-solving strategies, and to bring together skills and knowledge from various domains. The following list illustrates some of the demands that items of moderate complexity may make of students.

- Solve a word problem requiring multiple steps.
- Compare figures or statements.
- Provide a justification for steps in a solution process.
- Interpret a visual representation.
- Retrieve information from a graph, table, or figure and use the information to solve a problem requiring multiple steps.
- Interpret a simple argument.
- Generalize a pattern.

High Complexity

Items in this category make heavy demands on students by requiring them to engage in more abstract reasoning, planning, analysis, judgment, and creative thought. The following list illustrates some of the demands that items of high complexity may make of students.

- Perform a procedure having multiple steps and multiple decision points.
- Analyze similarities and differences between procedures and concepts.
- Formulate an original problem, given a situation.
- Solve a problem in more than one way.
- Explain and justify a solution to a problem.
- Describe, compare, and contrast solution methods.
- Formulate a mathematical model for a complex situation.
- Analyze the assumptions made in a mathematical model.
- Analyze or produce a deductive argument.
- Provide a mathematical justification.

Appendix 2: Example of *Grade 6 Mathematics Part A* Instructions Page

Grade 6 Provincial Achievement Test *Mathematics* *Part A*

To the Teacher

Read these instructions to your students.

Description

Time: 30 minutes. This test was developed to be completed in 30 minutes. You have up to 60 minutes to complete this test should you need it.

This test consists of 15 questions, each worth 1 mark.

Instructions

- Review the “Try the Tools” instructions.
- You may use manipulatives; however, use of a calculator is **not** permitted.
- You may **not** use a dictionary, a thesaurus, or other reference materials.
- Read each question carefully.
- If you change an answer, your test will be automatically updated.
- Answer every question.
- If an answer is a value between 0 and 1 (e.g., 0.25), then be sure to record the 0 before the decimal place.
- To submit your **final** responses, click “Submit” on the left side of the screen and confirm “I want to submit my assessment” when prompted by the pop-up.
- You will **not** be able to return to the test once the test is submitted.

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The personal information collected through the Provincial Achievement Testing Program is for the purpose of administering the program as well as support programs, policy evaluation, and measurement. This collection is authorized by section 4(c) of the *Protection of Privacy Act*. For questions about the collection of personal information, email EDC.PATS@gov.ab.ca or by mail to 6th floor, 44 Capital Boulevard, 10044 108 Street NW, Edmonton, Alberta T5J 5E6.

Appendix 3: Example of *Grade 6 Mathematics Part B* Instructions Page

Grade 6 Provincial Achievement Test *Mathematics* *Part B*

To the Teacher

Read these instructions to your students.

Description

Time: 75 minutes. This test was developed to be completed in 75 minutes. You have up to 150 minutes to complete this test should you need it.

This test consists of 40 questions, each worth 1 mark.

Instructions

- Review the “Try the Tools” instructions.
- You may use manipulatives; however, use of a calculator is **not** permitted.
- You may **not** use a dictionary, a thesaurus, or other reference materials.
- Read each question carefully.
- If you change an answer, your test will be automatically updated.
- Answer every question.
- If an answer is a value between 0 and 1 (e.g., 0.25), then be sure to record the 0 before the decimal place.
- To submit your **final** responses, click “Submit” on the left side of the screen and confirm “I want to submit my assessment” when prompted by the pop-up.
- You will **not** be able to return to the test once the test is submitted.

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Appendix 4: Examples of Descriptions Used for Text to Speech on the *Mathematics 6 Provincial Achievement Test*

This appendix has been prepared by Alberta Education and Childcare Provincial Assessment staff. The purpose of this appendix is to provide school staff with examples of the descriptions of diagrams, illustrations, and visuals used in provincial achievement test text to speech versions, which are available to students as an accommodation. These examples are neither exhaustive nor prescriptive. Test content is shown in black text and descriptions in blue text.

For students who are enrolled with a school, and who typically use audio for their coursework, no application is required to receive this accommodation when writing provincial achievement tests.

Scripting notes are written to describe sources that contain more than just text. Visual sources are described to maintain fairness for all students. However, some visual sources are not scripted, as students may be required to visually analyze a source to determine trends or extrapolate a conclusion. In these situations, the scripting notes would instruct students to examine the digital version of the test.

Units

Unit	Read as
s	seconds
min	minutes
h	hours
m	metres
cm ²	square centimetres
m ³	cubic metres
L	litres
mL	millilitres
g	grams
mg	milligrams
m/s	metres per second
km/h	kilometres per hour
°C	degrees Celsius
\$1.25	one dollar and twenty-five cents

Numerical values

Numerical Value	Read as
183.48	one hundred eighty-three decimal four eight
2 321	two thousand three hundred twenty-one
$\frac{3}{5}$	three over five
-5	negative five
$\frac{6+3}{2}$	six plus three all over two
π	pi

Note: Common fractions, such as $\frac{1}{2}$, may be read as “one over two” or “one half.”

Symbols and notation

Symbol	Read as
+	plus
-	minus
×	times
÷	divided by
=	equals or is equal to
a^2	a squared
b^3	b cubed
c^4	c to the exponent four
$(2n + 1)$	open bracket, two n plus one, closed bracket
$x > 0$	x is greater than zero
$x \leq 0$	x is less than or equal to zero
$x = 0$	x is equal to zero
$\sqrt{\frac{16}{9}}$	the square root of (pause) sixteen over nine
$\frac{\sqrt{16}}{9}$	the square root of sixteen all over nine
15:64	fifteen to sixty-four

Note: Commas are to be read only when reading ordered pairs.

Tables

Introduce the table starting with the title, if there is one, and then identify the number of columns and rows. Tables can be read in two different ways. One way is to list the column headings and any corresponding units first. Next, read across each row from left to right, stating the column heading before reading the data in each cell. Read empty spaces in tables as “blank.”

Number of People (n)	Cost (c)
2	\$55.00
4	\$64.50
6	\$74.00
8	\$83.50

There is a table with two columns and four rows. The column headings are “Number of People, n ” and “Cost, c .”

Number of People: two; Cost: fifty-five dollars and zero cents

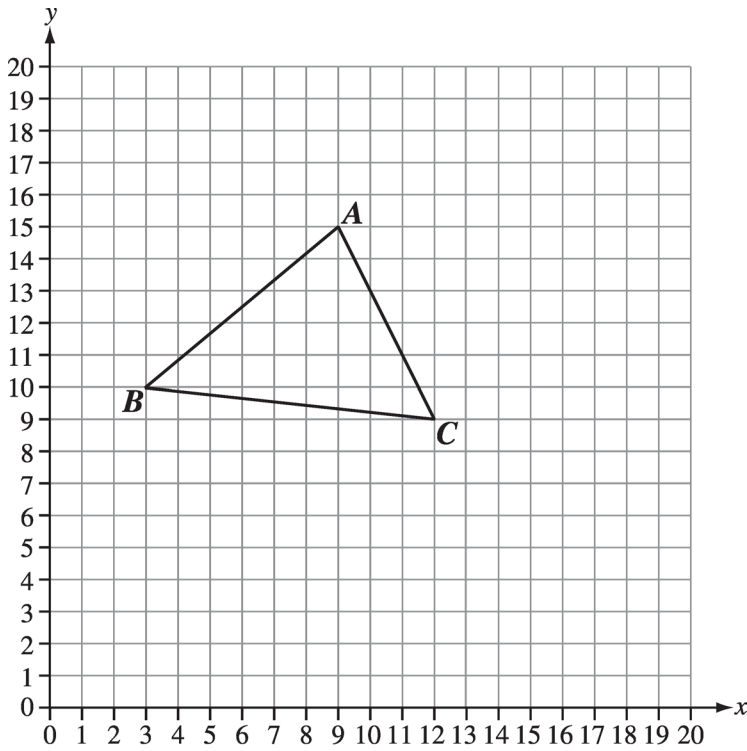
Number of People: four; Cost: sixty-four dollars and fifty cents

Number of People: six; Cost: seventy-four dollars and zero cents

Number of People: eight; Cost: eighty-three dollars and fifty cents

Graphs

Introduce the graph starting with the title, if there is one, and then describe the labels and scales for the horizontal axis and the vertical axis. If there are no marks or scale on the axis, state this. When there are four graphs for each of the multiple-choice options (A, B, C, and D), describe the labels and scales for the similarities between the graphs, such as the horizontal axis and the vertical axis, and then describe the shape of the line for each of the choices.



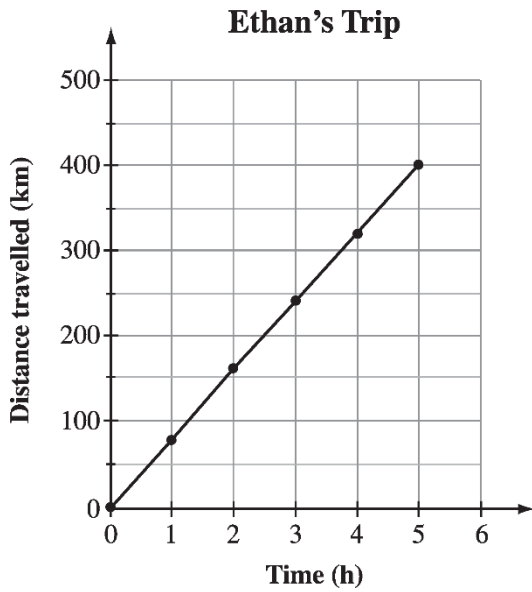
There is a grid representing the first quadrant of the Cartesian plane. The horizontal axis and vertical axis are scaled from zero to twenty, marked and labelled in increments of one. Triangle ABC is located on the grid.

Point A is located at nine comma fifteen.

Point B is located at three comma ten.

Point C is located at twelve comma nine.

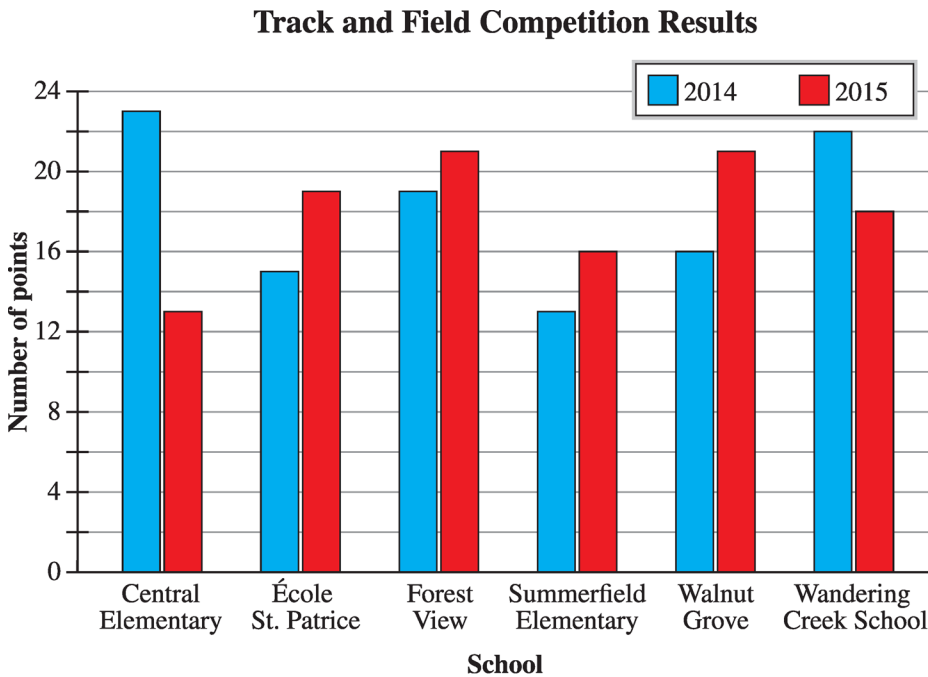
Line graphs



There is a line graph titled “Ethan’s Trip.” The horizontal axis is labelled “Time” in hours, scaled from zero to six, marked and labelled in increments of one. The vertical axis is labelled “Distance travelled” in kilometres, scaled from zero to five hundred, marked in increments of fifty and labelled in increments of one hundred. The dots have been connected in order by straight lines.

Bar graphs

Introduce the graph starting with the title, and then describe the label for the horizontal axis. List the label for each bar, and then describe the label and scale for the vertical axis. Describe the legend, if available.

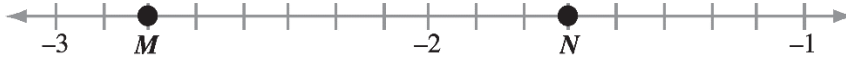


There is a double bar graph titled “Track and Field Competition Results.” The horizontal axis is labelled “School”, and from left to right the bars are labelled “Central Elementary,” “École St. Patrice,” “Forest View,” “Summerfield Elementary,” “Walnut Grove,” and “Wandering Creek School.” The vertical axis is labelled “Number of points,” scaled from zero to twenty-four, marked in increments of two and labelled in increments of four.

Two bar graphs are shown. A legend shows that the blue bar graph represents 2014 and the red bar graph represents 2015.

Number lines

Introduce the number line by describing the tick marks and arrows. Identify if the number line has open or solid, closed circles and their locations.



There is a diagram of a number line that has arrows at each end with two labelled points indicated by solid, closed circles. The number line is marked and labelled, reading from left to right, negative three, negative two, negative one; and there are seven tick marks between each label. Point M is located two tick marks to the right of negative three. Point N is located three tick marks to the right of negative two.

Provincial Assessment Contacts

Provincial Achievement Tests Help Desk

Email: EDC.PATS@gov.ab.ca

Literacy & Numeracy Screenings Help Desk

Email: litnumscreening@gov.ab.ca

Provincial Assessment mailing address

Provincial Assessment, Alberta Education and Childcare
44 Capital Boulevard
10044 108 Street NW
Edmonton AB T5J 5E6

Alberta Education and Childcare website alberta.ca/education-and-childcare

Online Assessment (for technical assistance)

Email: online.assessment@gov.ab.ca

Office hours:

Monday through Friday, 8:15 a.m. to 4:30 p.m.