

The tables that follow are designed to provide information about the content of each benchmark modular assessment **by grade and subject**. In the table you will find the name of the benchmark module, a brief description of the skills the module assesses, the names of each test form (e.g. A, B, C, etc.), and the number of test items on each form.

Benchmark Modules: Mathematics Grade 3

| Test Name | What This Test Measures | Form | Number of Items |
|---|---|------|-----------------|
| Benchmark Module: Math Grade 3 – Measurement, Data and Geometry | This test measures a student’s ability to solve problems involving measurement and estimation, represent and interpret data, understand concepts of area, recognize perimeter, and reason with shapes and their attributes. | A | 11 |
| | | B | 12 |
| Benchmark Module: Math Grade 3 – Number and Operations Base 10 | This test measures a student’s ability to use place value understanding and properties of operations to perform multi-digit arithmetic. | A | 12 |
| | | B | 12 |
| Benchmark Module: Math Grade 3 – Number and Operations Fractions | This test measures a student’s ability to develop an understanding of fractions as numbers. | A | 9 |
| | | B | 9 |
| | | C | 9 |
| Benchmark Module: Math Grade 3 – Operations and Algebraic Thinking | This test measures a student’s ability to represent and solve problems involving multiplication and division. | A | 9 |
| | | B | 9 |
| | | C | 9 |
| | | D | 12 |

Benchmark Modules: Mathematics Grade 4

| Test Name | What This Test Measures | Form | Number of Items |
|--|--|------|-----------------|
| Benchmark Module: Math Grade 4 – Measurement, Data and Geometry | This test measures a student's ability to solve problems involving measurement and conversion of measurements, represent and interpret data, understand concepts of angle and measure angles, draw and identify lines and angles, and classify shapes by properties of their lines and angles. | A | 10 |
| | | B | 10 |
| | | C | 8 |
| Benchmark Module: Math Grade 4 – Number and Operations Base 10 | This test measures a student's ability to generalize place value understanding for multi-digit whole numbers and to use place value understanding and properties of operations to perform multi-digit arithmetic. | A | 12 |
| | | B | 12 |
| | | C | 12 |
| Benchmark Module: Math Grade 4 – Number and Operations Fractions | This test measures a student's ability to extend understanding of fraction equivalence and ordering, build fractions from unit fractions, understand decimal notation for fractions, and compare decimal fractions. | A | 10 |
| | | B | 10 |
| | | C | 12 |
| Benchmark Module: Math Grade 4 – Operations and Algebraic Thinking | This test measures a student's ability to use the four operations with whole numbers to solve problems, gain familiarity with factors and multiples, and generate and analyze patterns. | A | 8 |
| | | B | 8 |
| | | C | 9 |

Benchmark Modules: Mathematics Grade 5

| Test Name | What This Test Measures | Form | Number of Items |
|---|--|------|-----------------|
| Benchmark Module: Math Grade 5 – Measurement, Data and Geometry | This test measures a student's ability to convert like measurement units within a given measurement system, represent and interpret data, and understand concepts of volume. | A | 9 |
| | | B | 9 |
| | | C | 9 |
| Benchmark Module: Math Grade 5 – Number and Operations Base 10 | This test measures a student's ability to understand the place value system and to perform operations with multi-digit whole numbers and with decimals to hundredths. | A | 10 |
| | | B | 10 |
| | | C | 10 |
| | | D | 9 |
| Benchmark Module: Math Grade 5 – Number and Operations Fractions | This test measures a student's ability to use equivalent fractions as a strategy to add and subtract fractions and to apply and extend previous understandings of multiplication and division. | A | 12 |
| | | B | 12 |
| | | C | 11 |
| Benchmark Module: Math Grade 5 – Operations and Algebraic Thinking | This test measures a student's ability to write and interpret numerical expressions and to analyze patterns and relationships. | A | 12 |
| | | B | 11 |

Benchmark Modules: Mathematics Grade 6

| Test Name | What This Test Measures | Form | Number of Items |
|--|---|------|-----------------|
| Benchmark Module: Math Grade 6 – Expressions & Equations | This test measures the student's ability to apply and extend previous understandings of arithmetic to algebraic expressions, reason with and solve one-variable equations and inequalities, and represent and analyze quantitative relationships between dependent and independent variables. | A | 11 |
| | | B | 12 |
| | | C | 11 |
| Benchmark Module: Math Grade 6 – Geometry/Statistics & Probability | This test measures the student's ability to solve real-world and mathematical problems involving area, surface area, and volume; develop an understanding of statistical variability; and summarize and describe distributions. | A | 12 |
| | | B | 12 |
| Benchmark Module: Math Grade 6 – Ratios & Proportional Relationships | This test measures the student's ability to understand ratio concepts and to use ratio reasoning to solve problems. | A | 12 |
| | | B | 11 |
| | | C | 12 |
| Benchmark Module: Math Grade 6 – The Number System | This test measures the student's ability to apply and extend previous understandings of multiplication and division to divide fractions by fractions, compute fluently with multi-digit numbers and find common factors and multiples, and apply and extend previous understandings of numbers to the system of rational numbers. | A | 13 |
| | | B | 12 |

Benchmark Modules: Mathematics Grade 7

| Test Name | What This Test Measures | Form | Number of Items |
|--|--|------|-----------------|
| Benchmark Module: Math Grade 7 – Expressions and Equations | This test measures the student's ability to use properties of operations to generate equivalent expressions and to solve real-life and mathematical problems using numerical and algebraic expressions and equations. | A | 8 |
| | | B | 8 |
| Benchmark Module: Math Grade 7 – Geometry | This test measures the student's ability to draw, construct, and describe geometrical figures and describe the relationships between them and to solve real-life and mathematical problems involving angle measure, area, surface area, and volume. | A | 8 |
| | | B | 8 |
| | | C | 8 |
| Benchmark Module: Math Grade 7 – Ratios and Proportions | This test measures the student's ability to analyze proportional relationships and use them to solve real-world and mathematical problems. | A | 8 |
| | | B | 9 |
| | | C | 9 |
| Benchmark Module: Math Grade 7 – Statistics and Probability | This test measures the student's ability to use random sampling to draw inferences about a population; draw informal comparative inferences about two populations; and investigate chance processes and develop, use, and evaluate probability models. | A | 12 |
| | | B | 13 |
| Benchmark Module: Math Grade 7 – Number System | This test measures the student's ability to apply and extend previous understandings of operations with fractions. | A | 8 |
| | | B | 8 |
| | | C | 9 |

Benchmark Modules: Mathematics Grade 8

| Test Name | What This Test Measures | Form | Number of Items |
|--|--|------|-----------------|
| Benchmark Module: Math Grade 8 – Expressions and Equations | This test measures the student's ability to work with radicals and integer exponents; understand the connections between proportional relationships, lines, and linear equations; and analyze and solve linear equations and pairs of simultaneous linear equations. | A | 10 |
| | | B | 11 |
| Benchmark Module: Math Grade 8 – Functions | This test measures the student's ability to define, evaluate, and compare functions and to use functions to model relationships between quantities. | A | 12 |
| | | B | 13 |
| Benchmark Module: Math Grade 8 – Geometry/The Number System | This test measures the student's ability to understand congruence and similarity using physical models, transparencies, or geometry software; understand and apply the Pythagorean Theorem; solve real-world and mathematical problems involving volume of cylinders, cones, and spheres; and know that there are numbers that are not rational, and approximate them by rational numbers. | A | 12 |
| | | B | 12 |
| | | C | 12 |
| | | D | 12 |
| Benchmark Module: Math Grade 8 – Statistics and Probability | This test measures the student's ability to investigate patterns of association in bivariate data. | A | 9 |
| | | B | 9 |

Benchmark Modules: Secondary Mathematics 1

| Test Name | What This Test Measures | Form | Number of Items |
|---|---|------|-----------------|
| Benchmark Module: Math SM1 – Algebra | This test measures the student's ability to solve systems of equations, represent and solve equations and inequalities graphically, create equations that describe numbers or relationships, and solve equations and inequalities in one variable. | A | 10 |
| | | B | 11 |
| | | C | 12 |
| Benchmark Module: Math SM1 – Geometry | This test measures the student's ability to experiment with transformations in the plane, use coordinates to prove simple geometric theorems algebraically, make geometric constructions, and understand congruence in terms of rigid motions. | A | 10 |
| | | B | 10 |
| | | C | 9 |
| Benchmark Module: Math SM1 – Number Quantity/Functions/ Statistics and Probability | This test measures the student's ability to construct and compare linear, quadratic, and exponential models and solve problems; interpret functions that arise in applications in terms of the context; build a function that models a relationship between two quantities; analyze functions using different representations; reason quantitatively and use units to solve problems; understand the concept of a function and use function notation; and summarize, represent, and interpret data on a single count or measurement variable. | A | 24 |
| | | B | 23 |

Benchmark Modules: Secondary Mathematics 2

| Test Name | What This Test Measures | Form | Number of Items |
|---|--|------|-----------------|
| Benchmark Module: Math SM2 – Functions | This test measures the student's ability to prove and apply trigonometric identities, interpret functions that arise in applications in terms of the context, build a function that models a relationship between two quantities, and analyze functions using different representations. | A | 10 |
| | | B | 10 |
| Benchmark Module: Math SM2 – Geometry | This test measures the student's ability to understand and apply theorems about circles, prove geometric theorems, prove theorems involving similarity, and explain volume formulas and use them to solve problems. | A | 12 |
| | | B | 12 |
| Benchmark Module: Math SM2 – Number & Quantity/Algebra | This test measures the student's ability to create equations that describe numbers or relationships, solve equations and inequalities in one variable, interpret the structure of expressions, use complex numbers in polynomial identities and equations, perform arithmetic operations on polynomials, extend the properties of exponents to rational exponents, and perform arithmetic operations with complex numbers. | A | 20 |
| | | B | 20 |
| Benchmark Module: Math SM2 – Statistics & Probability | This test measures the student's ability to understand independence and conditional probability and use them to interpret data, use probability to evaluate outcomes of decisions, and use the rules of probability to compute probabilities of compound events in a uniform probability model. | A | 9 |
| | | B | 9 |

Benchmark Modules: Secondary Mathematics 3

| Test Name | What This Test Measures | Form | Number of Items |
|--|---|------|-----------------|
| Benchmark Module: Math SM3 – Functions | This test measures the student's ability to construct and compare linear, quadratic, and exponential models and solve problems; interpret functions that arise in applications in terms of the context; build a function that models a relationship between two quantities; and analyze functions using different representations. | A | 11 |
| | | B | 11 |
| | | C | 11 |
| Benchmark Module: Math SM3 – Numbers & Quantity/Algebra | This test measures the student's ability to create equations that describe numbers or relationships, interpret the structure of expressions, use complex numbers in polynomial identities and equations, perform arithmetic operations on polynomials, use polynomial identities to solve problems, rewrite rational expressions, and understand solving equations as a process of reasoning and explain the reasoning. | A | 14 |
| | | B | 14 |
| | | C | 14 |
| Benchmark Module: Math SM3 – Statistics & Probability | This test measures the student's ability to summarize, represent, and interpret data on a single count or measurement variable; understand and evaluate random processes underlying statistical experiments; and make inferences and justify conclusions from sample surveys, experiments, and observational studies. | A | 9 |
| Benchmark Module: Math SM3 – Trigonometric Functions/Geometry | This test measures the student's ability to extend the domain of trigonometric functions using the unit circle, apply geometric concepts in modeling situations, visualize relationships between two-dimensional and three-dimensional objects, and model periodic phenomena with trigonometric functions. | A | 10 |
| | | B | 11 |