Pennsylvania Mathematics

Assessment Anchors & Eligible Content: Fifth Grade

Demonstrate understanding of place-value of whole numbers and decimals, and compare quantities or magnitudes of numbers. M05.A-T.1.1	**1** Demonstrate an understanding that in a multi-digit number, a digit in one place represents 1/10 of what it represents in the place to its left. A-T.1.1.1
	2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. A-T.1.1.2
	3 Read and write decimals to thousandths using base-ten numerals, word form, and expanded form. A-T.1.1.3
	4 Compare two decimals to thousandths based on meanings of the digits in each place using >, =, and < symbols. A-T.1.1.4
	5 Round decimals to any place (limit rounding to ones, tenths, hundredths, or thousandths place). A-T.1.1.5
Use whole numbers and decimals to compute accurately (straight computation or word problems). M05.A-T.2.1	**1** Multiply multi-digit whole numbers (not to exceed three-digit by three-digit). A-T.2.1.1
	2 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors. A-T.2.1.2
	3 Add, subtract, multiply, and divide decimals to hundredths (no divisors with decimals). A-T.2.1.3
Solve addition and subtraction problems involving fractions (straight computation or word problems) M05.A-F.1.1	**1** Add and subtract fractions (including mixed numbers) with unlike denominators. (May include multiple methods and representations.) A-F.1.1.1
Solve multiplication and division problems involving fractions and whole numbers (straight computation or word	**1** Solve word problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers). A-F.2.1.1
	2 Multiply a fraction (including mixed numbers) by a fraction. A-F.2.1.2

problems). M05.A-F.2.1	3. Demonstrate an understanding of multiplication as scaling (resizing). A-F.2.1.3
	4 Divide unit fractions by whole numbers and whole numbers by unit fractions. A-F.2.1.4
Analyze and complete calculations by applying the order of operations. M05.B-O.1.1	1 Use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions and evaluate expressions containing these symbols. B-O.1.1.1
	2 Write simple expressions that model calculations with numbers and interpret numerical expressions without evaluating them. B-O.1.1.2
Create, extend, and analyze patterns. M05.B-O.2.1	1 Generate two numerical patterns using two given rules. B-O.2.1.1
	2 Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules. B-O.2.1.2
Identify parts of a coordinate grid and describe or interpret points given an ordered pair. M05.C-G.1.1	1 Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant I. C-G.1.1.1
	2 Represent real-world and mathematical problems by plotting points in quadrant I of the coordinate plane and interpret coordinate values of points in the context of the situation. C-G.1.1.2
Use basic properties to classify two-dimensional figures. M05.C-G.2.1	1 Classify two-dimensional figures in a hierarchy based on properties. C-G.2.1.1
Solve problems using simple conversions (may include multistep, real-world problems). M05.D-M.1.1	1 Convert between different-sized measurement units within a given measurement system. A table of equivalencies will be provided. D-M.1.1.1
Organize, display, and answer questions based on data. M05.D-M.2.1	1 Solve problems involving computation of fractions by using information presented in line plots. D-M.2.1.1
	2 Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs. D-M.2.1.2
Use, describe, and develop procedures to solve problems involving volume. D-M.3.1	1 Apply the formulas V = l × w × h and V = B × h for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems. Formulas will be provided. D-M.3.1.1

2 **Find volumes of solid figures composed of two non-overlapping right rectangular prisms.** D-M.3.1.2