What math is on the PSAT/NMSQT

44 questions in two modules of 22 (20 operational, 2 pretest), 35 minutes each, 70 minutes in all; easiest to hardest within a module; the second module adapts to the first. Multiple choice (four options) and student-produced responses. About 30% in context. Built-in Desmos calculator for the whole section (an approved handheld may be brought). Section score 160-760. Whole test 2 h 14 min: Reading and Writing 54 questions / 64 minutes, then Math.

The four domains (College Board's question counts)

Domain	Questions	Topics
Algebra	13 to 15	Linear equations in one and two variables, linear functions, systems of two linear equations, linear inequalities
Advanced Math	12 to 14	Equivalent expressions; nonlinear equations in one variable and systems; nonlinear functions: absolute value, quadratic, exponential, polynomial, rational, radical
Problem-Solving and Data Analysis	7 to 9	Ratios, rates, proportional relationships and units; percentages; one- and two-variable data; probability; sample statistics and margin of error; evaluating statistical claims
Geometry and Trigonometry	4 to 6	Area and volume; lines, angles and triangles; right-triangle trigonometry; circles

About 60% of the section is algebra (Algebra + Advanced Math, 25-29 questions); about a fifth is problem-solving and data; geometry and trigonometry is 4-6 questions.

In practice

[ ] Algebra: solve and build linear equations and inequalities; slope and intercept in context; systems and their number of solutions; linear functions from tables and graphs.

[ ] Advanced Math: factoring, completing the square, exponent rules; quadratics by factoring, formula and graph; vertex and intercepts; exponential growth and decay; polynomial, rational, radical and absolute-value equations; systems with a nonlinear equation.

[ ] Problem-Solving and Data Analysis: ratios, rates, unit conversions, percent change; mean, median, range and standard deviation in words; scatterplots, two-way tables, histograms; probability from a table; margin of error.

[ ] Geometry and Trigonometry: area and volume; parallel lines and angles; congruence and similarity; right-triangle trig; the circle equation, arcs and sectors.

From sciencewithshobha.com/blog/what-math-is-on-the-psat-the-44-questions-in-two-35-minute-modules-the-four-content-domains-with-question-counts-algebra-advanced-math-problem-solving-and-data-analysis-geometry-and-trigonometry-the-calculator-and-how-to-prepare/ · 1-on-1 online tutoring for US families, Grade 1 to AP, free 30-minute first class.

Topic-by-topic checklist and the plan

Checklist (tick when secure)

[ ] Linear equations and inequalities in one variable
[ ] Linear functions: slope, intercept, interpretation
[ ] Systems of two linear equations; 0, 1 or many solutions
[ ] Exponent rules; equivalent expressions; factoring
[ ] Quadratics: factoring, formula, vertex form, graphs
[ ] Exponential functions: growth and decay
[ ] Polynomial, rational, radical and absolute-value equations
[ ] Nonlinear systems
[ ] Ratios, rates, proportions, unit conversion
[ ] Percentages and percent change
[ ] Mean, median, range, standard deviation (in words)
[ ] Scatterplots, two-way tables, histograms; probability from a table
[ ] Sample statistics and margin of error
[ ] Area and volume; angles and parallel lines
[ ] Similar and congruent triangles; Pythagorean theorem
[ ] Right-triangle trigonometry
[ ] Circles: equation, arcs, sectors
[ ] Desmos: graphing both sides of an equation; typing student-produced responses

Plan

Official Bluebook practice test date and Math score:_____

Wrong answers by domain (A / AM / PSDA / GT): _____

Topics to fix first (from the checklist): _____

Second practice test date: _____