

SAT Math test Questions

by MARY TAYLOR

Number and Operations (20-25%)

Arithmetic word problems (including percent, ratio and proportion)
Properties of Integers (even, odd, prime numbers, divisibility, etc.)
Rational numbers
Sets (union, intersection, elements)
Counting techniques
Sequences and series (including exponential growth)
Elementary number theory

Algebra and Functions (35-40%)

Substitution and simplifying algebraic expressions
Properties of exponents
Algebraic word problems
Solutions of linear equations and inequalities
System of equations and inequalities
Quadratic equations
Equations of lines
Absolute value
Direct and inverse variation
Concepts of algebraic functions
Newly defined symbols based on commonly used operations

Geometry and Measurement (25-30%)

Area and perimeter of a polygon
Area and circumference of a circle
Volume of a box, cube and cylinder
Pythagorean Theorem and special properties of isosceles, equilateral and right triangles
Properties of parallel and perpendicular lines
Coordinate geometry

Geometric visualization

Slope

Similarity

Transformations

Data Analysis, Statistics and Probability (10-15%)

Data interpretation (tables and graphs)

Descriptive statistics (mean, median, mode and range)

Probability

Calculators:

“We recommend that you bring a calculator to use of the mathematics section of the SAT. **Every question on the test can be solved without a calculator**, but you may have an advantage if you use a scientific or graphing calculator on some questions.”

by MARY TAYLOR