

Here's a math fundamentals notes sheet for SAT Math, organized in order of importance:

- **Arithmetic Operations:**

- Addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions
- Order of operations (PEMDAS/BODMAS)
- Percentages, ratios, and proportions
- Estimation techniques

- **Algebraic Concepts:**

- Solving linear equations and inequalities
- Exponents and radicals
- Quadratic equations and functions
- Systems of equations
- Simplifying algebraic expressions

- **Geometry and Measurement:**

- Properties of lines, angles, and triangles
- Perimeter, area, and volume calculations
- Pythagorean theorem
- Similarity and congruence
- Coordinate geometry (graphing points, lines, and equations)

- **Data Analysis and Statistics:**

- Reading and interpreting graphs, charts, and tables
- Measures of central tendency (mean, median, mode)
- Probability and counting principles
- Basic concepts of standard deviation and variance
- Interpreting trends and making predictions

- **Trigonometry:**

- Trigonometric ratios (sine, cosine, tangent)
- Solving right triangles using trigonometric functions
- Applying trigonometric concepts to real-world problems
- Understanding angles and arc lengths on the unit circle

- **Advanced Topics:**

- Complex numbers
- Polynomials and rational expressions
- Functions and their properties



- Logarithms and exponential functions
- Sequences and series

Remember, this notes sheet is just a starting point, and it's essential to dive deeper into each topic, practicing with SAT-style questions and examples to solidify your understanding. Use this as a guide to prioritize your study efforts and focus on any areas where you need more practice and check off each concept as you practice and master them. Good luck with your SAT Math preparation!

— **Maryam Farooqi, founder of Rise4Education**

