

The 8 Standards for Mathematical Practices

Develop these essential mathematical skills and behaviors to help you become proficient in math.



1. Make Sense of Problems and Persevere in Solving Them

Understand and analyze complex problems and develop a plan to solve them.

2. Reason Abstractly and Quantitatively

Use mathematical reasoning to make sense of numbers and their relationships and apply mathematical concepts to real-world situations.

3. Construct Viable Arguments and Critique the Reasoning of Others

Communicate your mathematical thinking and explain your reasoning. Also, evaluate and respond to the reasoning of others.

4. Model With Mathematics

Use mathematical models to represent and analyze real-world phenomena and make predictions based on those models.

5. Use Appropriate Tools Strategically

Select and use appropriate tools, such as calculators or manipulatives, to solve mathematical problems and to explore mathematical concepts.

6. Attend to Precision

Communicate your mathematical thinking precisely and accurately and use precise mathematical language and notation.

7. Look for and Make Use of Structure

Identify patterns and structures in mathematical problems and use them to develop strategies for solving problems.

8. Look for and Express Regularity in Repeated Reasoning

Identify regular patterns and relationships in mathematical situations and use those patterns to make generalizations and develop mathematical rules and procedures.

