

# NCTM Principles and Standards for School Mathematics

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## NCTM Principles for School Mathematics

- **Equity** Excellence in mathematics education requires equity—high expectations and strong support for all students.
- **Curriculum** A curriculum is more than a collection of activities: it must be coherent, focused on important mathematics, and well articulated across the grades.
- **Teaching** Effective mathematics teaching requires understanding what students know and need to learn and then challenging and supporting them to learn it well.
- **Learning** Students must learn mathematics with understanding, actively building new knowledge from experience and prior knowledge.
- **Assessment** Assessment should support the learning of important mathematics and furnish useful information to both teachers and students.
- **Technology** Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances students' learning.

## NCTM Standards for School Mathematics\*

Standard 1:	<b>Number and Operations</b>
Standard 2:	<b>Algebra</b>
Standard 3:	<b>Geometry</b>
Standard 4:	<b>Measurement</b>
Standard 5:	<b>Data Analysis and Probability</b>
Standard 6:	<b>Problem Solving</b>
Standard 7:	<b>Reasoning and Proof</b>
Standard 8:	<b>Communication</b>
Standard 9:	<b>Connections</b>
Standard 10:	<b>Representation</b>

\* The number assigned to each standard is for easy reference and is not part of each standard's official title.