

NCTM Principles and Standards for School Mathematics

For more information about the National Council of Teachers of Mathematics, log on to www.nctm.org.

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*

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

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