



The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important “processes and proficiencies” with longstanding importance in mathematics education. They are sometimes referred to as the *8 Standards for Mathematical Practice*. In this and subsequent issues you will find excerpts from these practices as well as brief sketches from the **Conference Board of Mathematical Science** of the Common Core State Standards for Mathematical Practice as they apply to teaching in elementary school.

## 6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Elementary school students attend to precision when they take care to make math drawings and carefully coordinate them with numerical work, such as when they show how to decompose a rectangle into component parts that correspond to the partial products in a multiplication problem. They also attend to precision when they describe a line of reasoning with care, attending to the key points and choosing their words to say exactly what they mean.

### Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. **Attend to precision.**
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.



### Try this!

**Estimate the product  $26 \times 34$ . Show your work and explain your thinking. Compare your estimate with someone else in your class. How do your estimates compare?**