

There are eight Common Core Standards for Mathematical Practice. Below they are summarized some explanatory descriptors (provided by the California County Superintendents Educational Services Association) following each. These Standards for Mathematical Practice are the same for every grade level K-12.

Students

1. Make sense of problems and persevere in solving them.
 - Find meaning in problems
 - Analyze, predict and plan solution pathways
 - Verify answers
 - Ask themselves the question: “Does this make sense?”
2. Reason abstractly and quantitatively.
 - Make sense of quantities and their relationships in problems
 - Create coherent representations of problems
3. Construct viable arguments and critique the reasoning of others.
 - Understand and use information to construct arguments
 - Make and explore the truth of conjectures
 - Justify conclusions and respond to arguments of others
4. Model with mathematics.
 - Apply mathematics to problems in everyday life.
 - Identify quantities in a practical situation
 - Interpret results in the context of the situation and reflect on whether the results make sense
5. Use appropriate tools strategically.
 - Consider the available tools when solving problems
 - Are familiar with tools appropriate for their grade or course (pencil and paper, concrete models, ruler, protractor, calculator, spreadsheet, computer programs, digital content located on a website, and other technological tools)
6. Be precise.
 - Communicate precisely to others
 - Use clear definitions, state the meaning of symbols and are careful about specifying units of measure and labeling axes
 - Calculate accurately and efficiently
7. Look for and make use of structure.
 - Discern patterns and structures
 - Can step back for an overview and shift perspective
 - See complicated things as single objects or as being composed of several objects
8. Look for and express regularity in repeated reasoning.
 - When calculations are repeated, look for general methods, patterns and shortcuts
 - Be able to evaluate when an answer makes sense