

Ohio Mathematical Processes Benchmarks

Grade 5-7

- A. Clarify problem-solving situation and identify potential solution processes; e.g., consider different strategies and approaches to a problem, restate problem from various perspectives.
- B. Apply and adapt problem-solving strategies to solve a variety of problems, including unfamiliar and non-routine problem situations.
- C. Use more than one strategy to solve a problem, and recognize there are advantages associated with various methods.
- D. Recognize whether an estimate or an exact solution is appropriate for a given problem situation.
- E. Use deductive thinking to construct informal arguments to support reasoning and to justify solutions to problems.
- F. Use inductive thinking to generalize a pattern of observations for particular cases, make conjectures, and provide supporting arguments for conjectures.
- G. Relate mathematical ideas to one another and to other content areas; e.g., use area models for adding fractions, interpret graphs in reading, science and social studies.
- H. Use representations to organize and communicate mathematical thinking and problem solutions.
- I. Select, apply, and translate among mathematical representations to solve problems; e.g., representing a number as a fraction, decimal or percent as appropriate for a problem.
- J. Communicate mathematical thinking to others and analyze the mathematical thinking and strategies of others.
- K. Recognize and use mathematical language and symbols when reading, writing and conversing with others.