

**Iowa
Mathematics State Standards
Correlated to Merit Software Mathematics Programs**

Mathematics Content Standards

1. Students can understand and apply a variety of math concepts.
2. Students can understand and apply methods of estimation.
3. Students can solve a variety of math problems.
4. Students can interpret data presented in a variety of ways.

Mathematics

Grades 3-5 Benchmarks

1. Students can understand and apply a variety of math concepts.
 - A. Students can understand and apply number properties and operations.
 - B. Students can understand and apply concepts and procedures of algebra.
 - C. Students can understand and apply concepts of geometry.
 - D. Students can understand and apply concepts of measurement.
 - E. Students can understand and apply concepts in probability and statistics.
2. Students can understand and apply methods of estimation.
 - A. Students can understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense.
3. Students can solve a variety of math problems.
 - A. Students can solve math problems.
 - B. Students can understand and apply problem-solving approaches and procedures.

4. Students can interpret data presented in a variety of ways.
 - A. Students can use tables and graphs to locate and read information.
 - B. Students can interpret data from a variety of sources.

Merit Software: Fraction Shape-Up

Grades 6-9 Benchmarks

1. Students can understand and apply a variety of math concepts.
 - A. Students can understand and apply number properties and operations.
 - B. Students can understand and apply concepts and procedures of algebra.
 - C. Students can understand and apply concepts of geometry.
 - D. Students can understand and apply concepts of measurement.
 - E. Students can understand and apply concepts in probability and statistics.
2. Students can understand and apply methods of estimation.
 - A. Students can understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense.
3. Students can solve a variety of math problems.
 - A. Students can solve math problems.
 - B. Students can understand and apply problem-solving approaches and procedures.
4. Students can interpret data presented in a variety of ways.

- A. Students can use tables and graphs to locate and read information.
- B. Students can interpret data from a variety of sources.

Merit Software: Fraction Shape-Up; Basic Algebra Shape-Up; Pre-Algebra Shape-Up; Word Problem Shape-Up

Grades 10-12 Benchmarks

1. Students can understand and apply a variety of math concepts.
 - A. Students can understand and apply number properties and operations.
 - B. Students can understand and apply concepts and procedures of algebra.
 - C. Students can understand and apply concepts of geometry and measurement.
 - D. Students can understand and apply concepts in probability and statistics.
2. Students can understand and apply methods of estimation.
 - A. Students can understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense.
3. Students can solve a variety of math problems.
 - A. Students can solve math problems requiring multiple steps and operations.
 - B. Students can reason quantitatively.
4. Students can interpret data presented in a variety of ways.
 - A. Students can make inferences based on data presented in a variety of ways.
 - B. Students can interpret data from a variety of sources.

Merit Software (As review): Basic Algebra Shape-Up; Pre-Algebra Shape-Up; Word Problem Shape-Up