

## Grade 6 Mathematics ISAT Proficiency Level Descriptors

### Advanced

In the area of mathematics, sixth grade students typically performing at the Advanced level consistently demonstrate a **thorough understanding** of grade-level skills. These students

- demonstrate thorough understanding of place value, the numeration system, and estimation.
- perform challenging calculations.
- demonstrate firm understanding of measurement concepts and tools including length, perimeter, area, time, mass, and capacity.
- apply ratios and scales in a variety of contexts.
- translate and evaluate complex numerical and algebraic expressions and equations.
- extend and describe challenging patterns presented in multiple formats.
- apply advanced geometric concepts related to size, shape, and spatial relationships.
- interpret, translate between, and recognize uncommon relationships of different types of data displays.
- demonstrate understanding of more involved probability.

### Proficient

In the area of mathematics, sixth grade students typically performing at the Proficient level demonstrate a **general understanding** of grade-level skills. These students

- demonstrate understanding of place value, the numeration system, and estimation.
- perform grade-level calculations.
- demonstrate understanding of measurement concepts and tools including length, perimeter, area, time, mass, and capacity.
- perform one-step conversions between units of measure.
- use simple ratios and scales.
- translate and evaluate numerical and algebraic expressions and equations.
- solve grade-level one-step equations.
- extend and describe patterns.
- apply geometric concepts related to size, shape, and spatial relationships.
- demonstrate an understanding of plotting points on a coordinate grid within the first quadrant.
- read, interpret, and make predictions given information from tables, charts, and graphs.
- organize information into data displays.
- determine mean, median, mode, and range.
- demonstrate understanding of simple probability.

## **Basic**

In the area of mathematics, sixth grade students typically performing at the Basic level demonstrate a **limited understanding** of grade-level skills. These students

- demonstrate limited understanding of place value, the numeration system, and estimation.
- perform simple calculations.
- demonstrate limited understanding of measurement concepts and tools including length, perimeter, area, time, mass, and capacity.
- perform one-step conversions between common units of measure.
- show limited understanding of simple ratios and scales.
- translate and evaluate simple numerical and algebraic expressions and equations.
- solve basic one-step equations.
- extend simple patterns.
- apply some geometric concepts.
- have limited understanding of plotting points on a coordinate grid within the first quadrant.
- read basic displays of data.
- demonstrate limited understanding of mean, median, mode, or range.
- recognize basic concepts of probability.