

Grade 6 Mathematics ISAT Proficiency Level Descriptors

Advanced

Sixth grade students typically performing at the Advanced level consistently demonstrate a thorough understanding of grade-level mathematics. They use the numeration system and estimation, measurement concepts and tools, complex numeric and algebraic expressions, and more involved probability concepts in order to solve real-world problems. Students model real-world situations using challenging patterns in multiple formats, geometric concepts, and data displays. Students show the ability to consistently perform challenging calculations, apply ratios and scales in a variety of contexts, and solve complex equations as a way to demonstrate their understanding of the relationships between mathematics and the world around them.

Proficient

Sixth grade students typically performing at the Proficient level demonstrate a general understanding of grade-level mathematics. They use the numeration system and estimation, measurement concepts and tools, numeric and algebraic expressions, ratios and scales, and probability in order to solve real-world problems. Students model real-world situations using patterns, geometric concepts, and data displays. Students show the ability to adequately perform calculations, convert units of measurement, plot first quadrant points on a coordinate grid, solve equations, and determine statistical measures as a way to demonstrate their understanding of the relationships between mathematics and the world around them.

Basic

Sixth grade students typically performing at the Basic level demonstrate a limited understanding of grade-level mathematics. They demonstrate limited use of the numeration system and estimation, measurement concepts, simple numeric and algebraic expressions, and rudimentary concepts of probability in an attempt to solve real-world problems. Students model basic real-world situations using simple patterns, some geometric concepts, and simple data displays. Students show the ability to perform simple calculations, convert some units of measurement, plot some first quadrant points on a coordinate grid, solve some equations, and determine simple statistical measures in an attempt to demonstrate their understanding of the relationships between mathematics and the world around them.