

Grade 5 Mathematics ISAT Proficiency Level Descriptors

Advanced

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

- demonstrate an excellent understanding of place value and the numeration system.
- perform challenging calculations.
- demonstrate a thorough understanding of measurement concepts, estimation, and tools including length, perimeter, area, time, temperature, mass, and capacity.
- perform advanced one-step conversions of length and time within each system.
- translate complex numerical and algebraic expressions and equations.
- solve challenging grade-level equations involving factors.
- extend and describe challenging patterns.
- analyze and apply grade-level geometric concepts related to size, shape, and spatial relationships.
- demonstrate an excellent understanding of plotting points in the first quadrant on a coordinate grid.
- analyze and interpret tables, charts, bar graphs, and line graphs.
- apply median, mode, and range using simple sets of data.
- demonstrate in-depth understanding of simple probability.

Proficient

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

- demonstrate an understanding of place value and the numeration system.
- perform grade-level calculations.
- demonstrate an understanding of measurement concepts, estimation, and tools including length, perimeter, area, time, temperature, mass, and capacity.
- perform one-step conversions of length and time within each system.
- translate numerical and algebraic expressions and equations.
- solve grade-level equations involving factors.
- extend and describe patterns.
- apply geometric concepts related to size, shape, and spatial relationships.
- use ordered pairs to identify and plot points in the first quadrant on a coordinate grid.
- read and interpret tables, charts, bar graphs, and line graphs.
- determine median, mode, and range using simple sets of data.
- demonstrate and predict results of simple probability.

Basic

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

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