

Grade 5 OCCT Mathematics Performance Level Descriptors (PLDs)

Advanced: Students demonstrate superior performance on challenging subject matter. In addition to demonstrating a broad and in-depth understanding and application of all skills at the Proficient level, students scoring at the Advanced level typically: use a wide range of strategies to solve problems; regularly use various types of reasoning effectively; consistently connect one area or idea of mathematics to another; and communicate mathematical ideas through a variety of representations.

Proficient: Students demonstrate mastery over appropriate grade-level subject matter, and students are ready for the next grade level. Students scoring at the Proficient level typically will:

- Describe rules that produce patterns found in tables, graphs, and models, and use variables to solve problems or to describe general rules in algebraic expression or equation form.
- Use algebraic problem-solving techniques to solve problems.
- Recognize and apply the commutative, associative, and distributive properties to solve problems.
- Apply the concept of place value of whole numbers through hundred millions and model, read, and write decimal numbers through the thousandths.
- Represent with models the connection between fractions and decimals, compare and order fractions and decimals, and be able to convert from one representation to the other to solve problems.
- Estimate, add, or subtract decimal numbers with same and different place values to solve problems.
- Estimate, add, or subtract fractions to solve problems using a variety of methods.
- Estimate and find the quotient with two-digit divisors and a two- or three-digit dividend to solve application problems.
- Compare and contrast the basic characteristics of circle and polygons.
- Compare, estimate, and determine the measurement of angles.
- Convert basic measurements of volume, mass and distance within the same system for metric and customary units.
- Compare and translate displays of data and justify the selection of the type of table or graph.
- Use the fundamental counting principle on sets with up to four items to determine the number of possible combinations.

Limited Knowledge: Students demonstrate partial mastery of the essential knowledge and skills appropriate to their grade level. Students scoring at the Limited Knowledge level are inconsistent in applying the general knowledge and mathematical process skills at the Proficient level necessary to solve problems effectively and reason mathematically.

Unsatisfactory: Students have not performed at least at the Limited Knowledge level. Students scoring at the Unsatisfactory level should be given comprehensive mathematics instruction.