

Oklahoma School Testing Program
Core Curriculum Tests
Performance-Level Descriptors
End-of-Instruction ACE Algebra II

Advanced: Students demonstrate full and complete understanding of all measured standards and objectives included in the Algebra II Oklahoma C³ framework. In addition to having this advanced level of Algebra II skills and the ability to independently apply these skills, students at the Advanced level consistently use a wide range of strategies to solve real-world, non-routine problems; regularly use various types of reasoning effectively; consistently connect one area or idea of mathematics to another; and communicate mathematical ideas clearly through a variety of representations. Students at this level are clearly prepared to excel in higher level mathematics classes and in job functions that require application of Algebra II knowledge and skills.

Proficient: Students demonstrate mastery of the knowledge and skills expected of all students at the End-of-Instruction in Algebra II, as follows: simplify expressions involving rational exponents, polynomials, rational expressions, and complex numbers; perform operations with and combine functions; use various types of notations to specify domain and range; find and graph inverses; model and solve systems of equations; model, solve, and graph quadratic equations; identify, graph, and write equations of conic sections; model and graph exponential and logarithmic functions; apply inverse relationship between exponential and logarithmic functions; model, solve, and sketch the graph of polynomial equations; identify intercepts, maximums, and minimums of graphs of rational equations; display data on a scatter plot, intercept results using an equation, and identify whether the equation is a curve of best fit; identify and use arithmetic and geometric sequences and series to solve problems. Students at the Proficient level consistently and independently apply these skills to routine problems. Students at this level are prepared to succeed in higher level mathematics classes and in job functions that require application of Algebra II knowledge and skills.

Limited Knowledge: Students typically demonstrate a partial mastery/understanding of the mathematics knowledge, skills and processes expected of all students at the End-of-Instruction in Algebra II. Students are inconsistent in applying the general knowledge and mathematical process skills necessary to solve problems effectively and to reason mathematically. These students may need interventions as a part of a comprehensive mathematics instructional program.

Unsatisfactory: Students demonstrate less than a Limited Knowledge level of the skills expected of all students at the End-of-Instruction in Algebra II. These students should be given intensive interventions as a part of a comprehensive mathematics instructional program.