## Oklahoma School Testing Program Core Curriculum Tests Performance-Level Descriptors End-of-Instruction ACE Geometry

Advanced: Students demonstrate full and complete understanding of all measured standards and objectives included in the Geometry Okalhoma C<sup>3</sup> framework. In addition to having this advanced level of Geometry 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, nonroutine 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 Geometry knowledge and skills. Proficient: Students demonstrate mastery of the knowledge and skills expected of all students at the End-of-Instruction in Geometry, as follows: use deductive and inductive reasoning skills to solve problems; use angle and line relationships to solve problems involving parallel lines; apply properties of two-dimensional figures to determine unknown values and solve problems; verify and use relationships of similar triangles and other two-dimensional figures; verify and use relationships of congruent triangles and other two dimensional figures; use relationships related to circles to find angle measures, arc measures, and segment lengths; use properties of right triangles and trigonometric ratios to solve problems; use properties of three dimensional figures, including similarity and congruency to identify figures and unknown values; create two-dimensional representations of three-dimensional objects and visa versa; use coordinate geometry to find distance, midpoint, and slopes of lines; use a set of points and properties to identify types of figures; use transformations on geometric figures 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 Geometry 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 Geometry. 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 Geometry. These students should be given intensive interventions as a part of a comprehensive mathematics instructional program.