SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

PASS			Strand and Standard		
Strand	**Standard #**	**PASS**		**Grade**	**Common Core State Standard**
HIGH SCHOOL 9-12 PROCESS STANDARDS					
*** Legends/Abbreviations can be found in a separate table.**					
P	1.1	Apply a wide variety of problem-solving strategies (identify a pattern, use equivalent representations) to solve problems from within and outside mathematics.			
P	1.2	Identify the problem from a described situation, determine the necessary data and apply appropriate problem-solving strategies.			
P	2.1	Use mathematical language and symbols to read and write mathematics and to converse with others.			
P	2.2	Demonstrate mathematical ideas orally and in writing.			
P	3.1	Use various types of logical reasoning in mathematical contexts and real-world situations.	F.LE.5	9-12	Construct and compare linear, quadratic, and exponential models and solve problems. Interpret the parameters in a linear or exponential function in terms of a context.*
P	2.3	Analyze mathematical definitions and discover generalizations through investigations.			
P	3.2	Prepare and evaluate suppositions and arguments.			
P	3.3	Verify conclusions, identify counterexamples, test conjectures, and justify solutions to mathematical problems.			

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

P	3.4	Justify mathematical statements through proofs.	G.CO.9	9-12	Prove geometric theorems. Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
P	3.4	Justify mathematical statements through proofs.	G.CO.10	9-12	Prove geometric theorems. Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180 degrees; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
P	3.4	Justify mathematical statements through proofs.	G.CO.11	9-12	Prove geometric theorems. Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.
P	3.4	Justify mathematical statements through proofs.	G.SRT.4	9-12	Prove theorems involving similarity. Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.
P	3.4	Justify mathematical statements through proofs.	G.SRT.5	9-12	Prove theorems involving similarity. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
P	3.4	Justify mathematical statements through proofs.	G.GPE.4	9-12	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point (0, 2).

SIDE BY SIDE OF OKLAHOMA PASS STRANDS AND COMMON CORE STATE STANDARDS

P	3.4	Justify mathematical statements through proofs.	G.GPE.5	9-12	Use coordinates to prove simple geometric theorems algebraically. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
P	4.1	Link mathematical ideas to the real world (e.g., statistics helps qualify the confidence we can have when drawing conclusions based on a sample).	F.LE.5	9-12	Construct and compare linear, quadratic, and exponential models and solve problems. Interpret the parameters in a linear or exponential function in terms of a context.*
P	4.2	Apply mathematical problem-solving skills to other disciplines.			
P	4.3	Use mathematics to solve problems encountered in daily life.	F.LE.5	9-12	Construct and compare linear, quadratic, and exponential models and solve problems. Interpret the parameters in a linear or exponential function in terms of a context.*
P	4.4	Relate one area of mathematics to another and to the integrated whole (e.g., connect equivalent representations to corresponding problem situations or mathematical concepts).			
P	5.1	Use algebraic, graphic, and numeric representations to model and interpret mathematical and real world situations.			
P	5.2	Use a variety of mathematical representations as tools for organizing, recording, and communicating mathematical ideas (e.g., mathematical models, tables, graphs, spreadsheets).			
P	5.3	Develop a variety of mathematical representations that can be used flexibly and appropriately.			