2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Section I. Correlation with the Mathematics 2009 SOL and Curriculum Framework	Rating		
	Adequate	Limited	No Evidence
G.1	✓		
G.2	✓		
G.3	✓		
G.4	✓		
G.5	✓		
G.6	✓		
G.7	✓		
G.8	✓		
G.9	✓		
G.10	✓		
G.11	✓		
G.12	✓		
G.13	✓		
G.14	✓		

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Section II. Additional Criteria: Instructional Planning and Support	**Rating**		
	Adequate	**Limited**	**No Evidence**
1. Materials emphasize the use of effective instructional practices and learning theory.	✓		
a. Students are guided through critical thinking and problem-solving approaches.	✓		
b. Concepts are introduced through concrete experiences that use manipulatives and other technologies.	✓		
c. Multiple opportunities are provided for students to develop and apply concepts through the use of calculators, computers, and other technologies.	✓		
d. Students use the language of mathematics including specialized vocabulary and symbols.	✓		
e. Students use a variety of representations (graphical, numerical, symbolic, verbal, and physical) to connect mathematical concepts.	✓		
2. The mathematics content is significant and accurate.	✓		
a. Materials are presented in an organized, logical manner which represents the current thinking on how students learn mathematics.	✓		
b. Materials are organized appropriately within and among units of study.	✓		
c. Format design includes titles, subheadings, and appropriate cross-referencing for ease of use.	✓		
d. Writing style, length of sentences, vocabulary, graphics, and illustrations are appropriate.	✓		
e. Level of abstraction is appropriate, and practical/real-life examples, including careers, are provided.	✓		
f. Sufficient applications are provided to promote depth of application.	✓		
3. Materials present content in an accurate, unbiased manner.	✓		

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard of Learning	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.1 The student will construct and judge the validity of a logical argument consisting of a set of premises and a conclusion. This will include			
a) identifying the converse, inverse, and contrapositive of a conditional statement;	✓		
b) translating a short verbal argument into symbolic form;	✓		
c) using Venn diagrams to represent set relationships; and	✓		
d) using deductive reasoning.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.2 The student will use the relationships between angles formed by two lines cut by a transversal to			
a) determine whether two lines are parallel;	✓		
b) verify the parallelism, using algebraic and coordinate methods as well as deductive proofs; and	✓		
c) solve real-world problems involving angles formed when parallel lines are cut by a transversal.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.3 The student will use pictorial representations, including computer software, constructions, and coordinate methods, to solve problems involving symmetry and transformation. This will include			
a) investigating and using formulas for finding distance, midpoint, and slope;	✓		
b) applying slope to verify and determine whether lines are parallel or perpendicular;	✓		
c) investigating symmetry and determining whether a figure is symmetric with respect to a line or a point; and	✓		
d) determining whether a figure has been translated, reflected, rotated, or dilated, using coordinate methods.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.4 The student will construct and justify the constructions of			
a) a line segment congruent to a given line segment;	✓		
b) the perpendicular bisector of a line segment;	✓		
c) a perpendicular to a given line from a point not on the line;	✓		
d) a perpendicular to a given line at a given point on the line;	✓		
e) the bisector of a given angle;	✓		
f) an angle congruent to a given angle; and	✓		
g) a line parallel to a given line through a point not on the given line.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.5 The student, given information concerning the lengths of sides and/or measures of angles in triangles, will			
a) order the sides by length, given the angle measures;	✓		
b) order the angles by degree measure, given the side lengths;	✓		
c) determine whether a triangle exists; and	✓		
d) determine the range in which the length of the third side must lie.	✓		
These concepts will be considered in the context of real-world situations.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard		**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
		Adequate	**Limited**	**No Evidence**
G.6	The student, given information in the form of a figure or statement, will prove two triangles are congruent, using algebraic and coordinate methods as well as deductive proofs.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.				

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard		**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
		Adequate	**Limited**	**No Evidence**
G.7	The student, given information in the form of a figure or statement, will prove two triangles are similar, using algebraic and coordinate methods as well as deductive proofs.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.				

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard		**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
		Adequate	**Limited**	**No Evidence**
G.8	The student will solve real-world problems involving right triangles by using the Pythagorean Theorem and its converse, properties of special right triangles, and right triangle trigonometry.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.				

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard		**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
		Adequate	**Limited**	**No Evidence**
G.9	The student will verify characteristics of quadrilaterals and use properties of quadrilaterals to solve real-world problems.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.				

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.10 The student will solve real-world problems involving angles of polygons.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.11 The student will use angles, arcs, chords, tangents, and secants to			
a) investigate, verify, and apply properties of circles;	✓		
b) solve real-world problems involving properties of circles; and	✓		
c) find arc lengths and areas of sectors in circles.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.12 The student, given the coordinates of the center of a circle and a point on the circle, will write the equation of the circle.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.13 The student will use formulas for surface area and volume of three-dimensional objects to solve real-world problems.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			

2010 Mathematics Textbooks and Instructional Materials Committee Member
Correlation to the 2009 Mathematics Standards of Learning and Curriculum Framework – Geometry

Text/Instructional Material Title: Geometry Virginia Edition

Publisher: Pearson Education, Inc., publishing as Prentice Hall

Mathematics Standard	**Rating Scale** Please indicate the rating for each by placing an X in the appropriate cell.		
	Adequate	**Limited**	**No Evidence**
G.14 The student will use similar geometric objects in two- or three-dimensions to			
a) compare ratios between side lengths, perimeters, areas, and volumes;	✓		
b) determine how changes in one or more dimensions of an object affect area and/or volume of the object;	✓		
c) determine how changes in area and/or volume of an object affect one or more dimensions of the object; and	✓		
d) solve real-world problems about similar geometric objects.	✓		
Comments: Provide comments to support "limited" or "no evidence" ratings.			