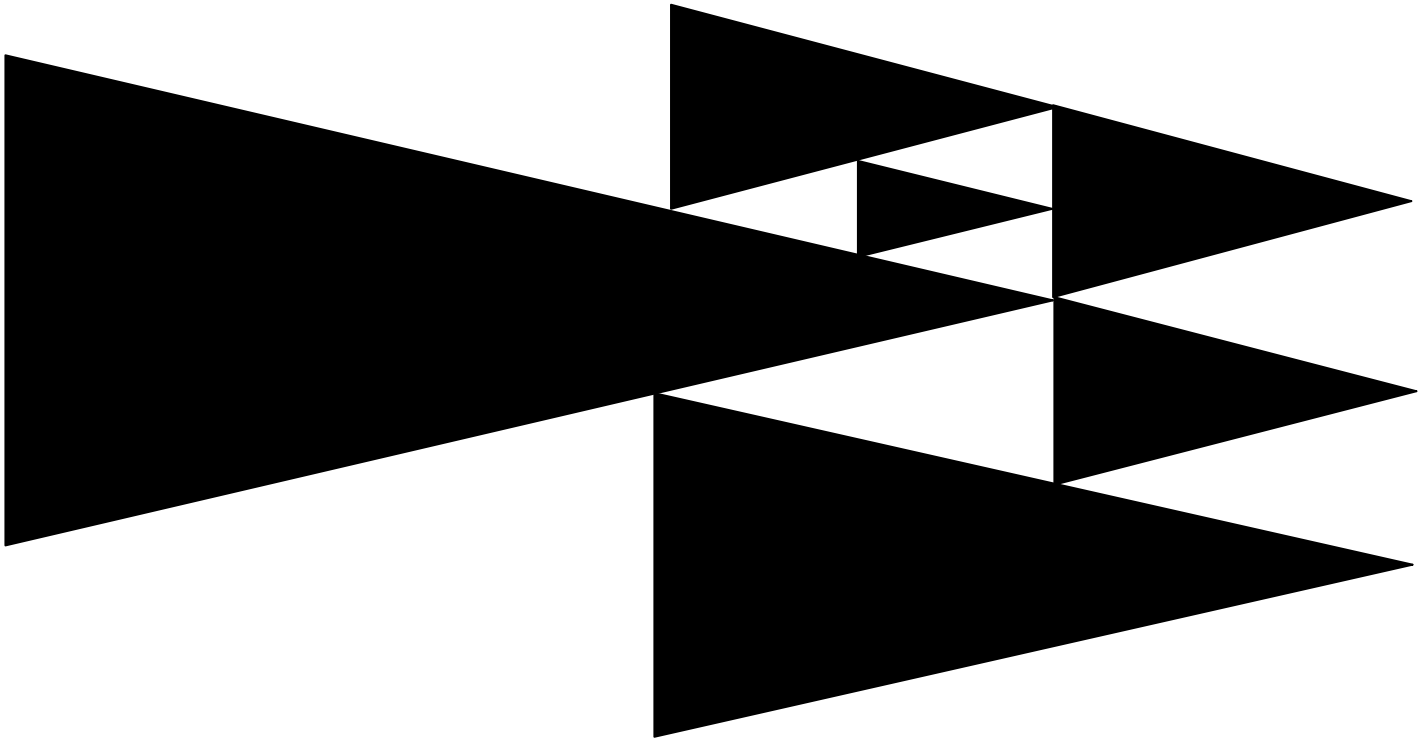
pacing guide
mathematics – cmp geometry
duval county schools
version 2.0



CPM Geometry Pacing Guide

Day	Performance Standard	Instructional Materials	Evaluation
1-5		Unit 0 –Study teams and Coordinate Grids (Prelude)	
6-15	The Student will 1.4 Determine the slope and the x- and y-intercept of given lines. 1.6 Graph linear equations in two variables. 1.7 Determine equations for lines with given conditions. 7.1 Use the Pythagorean Theorem and its converse to solve problems. 7.2 Find distances and midpoints between given points using the coordinate plane. 9.1 Solve problems related to area of polygons, including the area of triangles, squares, rectangles, parallelograms, and trapezoids. Algebra I The student will: 6.1 Simplify expressions involving exponents. 6.2 Add and subtract polynomials. 6.3 Multiply polynomials MJ/Mathematics 1 The student will: 3.1 Recognize, classify, and analyze polygons. 5.1 Find areas and perimeters of rectangular shapes and non-rectangular shapes.	Unit 1 – Perimeter, Areas, Graphing, and Equations (Riding a Roller Coaster) The Pythagorean Theorem Introducing Area and Perimeter Linear Equations Finding Slopes Unit and Tool Kit Review	
16			Formative

Day	Performance Standard	Instructional Materials	Evaluation
			assessment
17-25	The student will: 10.2 Use inductive reasoning to observe data, recognize patterns, and make generalizations. Algebra I The student will: 4.1 Solve equations using the addition property of equality or subtraction property of equality. 4.2 Solve equations using the multiplication property of equality or division property of equality. 5.2 Use the addition property of order and multiplication property of order to solve simple inequalities. 5.3 Graph solution sets of inequalities number lines. 6.1 Simplify expressions involving exponents. 6.2 Add and subtract polynomials. 6.3 Multiply polynomials. 10.1 Solve systems of linear equations by substitution and linear combination.	Unit 2 – Beginning Proof (Convincing Your Team) Logical Argumentation, Part 1 Logical Argumentation, Part 2 Logical Argumentation, Part 3 Writing Justifications Algebraic Inequalities Expressing yourself Clearly Solving Systems of Equations by Substitution Writing Conclusions Solving Systems of Equations by Addition Unit and Tool Kit Review	
26			Formative assessment
26-36	The student will: 1.1 Make conjectures relating to vertical angles, complementary angles, supplementary angles, and angles formed by perpendicular lines. 1.2 Make conjectures related to angles and parallel lines, including alternate interior/exterior angles, and same-side interior/exterior angles.	Unit 3 – Problem Solving and Geometry Fundamentals Patterns Looking for Patterns in Tables Finding General Terms From Patterns Rays and Angles	

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	1.3 Solve problems related to angles and parallel lines. 1.4 Determine soles of lines parallel and perpendicular to given lines. 2.1 Solve problems involving interior and exterior angles of triangles.	Parallel Lines and Angle Relationships Adjacent and vertical Angles Practice With Angles Graphing Linear Inequalities Angles and Triangles Exterior Angles	
37			Project Formative assessment
38-47	The student will: 9.3 Find lateral area and total area of selected solids, including prisms, pyramids, cylinders, and cone. 9.4 Find the volume of prisms, pyramids, cylinders, cones, and spheres.	Unit 4 – Spatial Visualization (The TransAmerica Pyramid) Introduction to Quadratic Functions Graphing Non-Linear Inequalities Visualizing, Part 1 Visualizing, Part 2 Isometric Drawings Mat Plans for Isometric Drawings Polyhedra and Surface Area Drawing Polyhedra Surface Area Unit Review and Tool Kit	
48			Formative assessment
49-58	The student will: 1.5 Determine slope of lines parallel and perpendicular to given	Units 5 – Congruence and Triangles	

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	lines. 2.4 Use inequalities in one triangle and inequalities between two triangles to solve problems. 3.1 State the postulate or theorem (SSS, SAS, ASA, AAS, HL) which justifies the congruence of two triangles. 3.2 Write paragraph proofs to demonstrate the congruence of triangles and its corresponding parts. 5.1 Determine the image of given figures under specified translations, reflections, rotations, and dilations. 5.2 Describe the type of symmetry for given designs.	Symmetry and reflections Translations and Rotations Congruence Congruent Triangles Using Congruent Triangles Triangle Congruence Proofs More Congruence Properties The Triangle Inequality Unit and Tool Kit Review	
59			Formative assessment
60-69	The student will: 1.3 Solve problems related to angles and parallel lines. 2.1 Solve problems involving interior and exterior angles of triangles. 2.2 Use properties related to altitudes and medians of triangles to solve problems. 2.3 Use Properties related to isosceles triangles to solve problems. 7.1 Use the Pythagorean Theorem and its converse to solve problems. 10.1 Recognize the hypothesis and conclusion of an if-then statement and state its converse. 10.2 Use inductive reasoning to observe data, recognize patterns, and make generalizations. 10.3 Complete geometric proofs by applying appropriate postulates and theorems.	Unit 6 – Writing Proofs Tool Kit and Arrow Diagrams Proofs of Familiar Ideas Theorems and More Proofs of Familiar Ideas Flowchart Proofs Flowchart Proofs of Parallelism Conjectures Proving the Pythagorean Theorem Converses and Counterexample Two Column Proofs Proof by tool Kit Contradiction Unit and Took Kit Review	

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70			Formative assessment
71-81	The student will: 7.2 Solve problems related to 30-60-90 and 45-45-90 triangles. Algebra The student will: 8.4 Simplify radical expressions involving square roots. 8.5 Add, subtract, and multiply radicals. Trigonometry The student will: 4.5 Use appropriate instruments of technology to estimate the values of given trigonometric functions. 5.1 Identify the six trigonometric ratios in terms of the sides of right triangles. 5.2 Solve problems relating o right triangles. 5.3 Solve problems relating to oblique triangles using the Law of Sines.	Unit 7 – Trigonometry (The Height of Red Hill) Right Triangle Trigonometry The Tangent Ratio The Sine and Cosine Ratios Using Trigonometry to Solve Problems Proofs and More Applications Special Right Triangles Law of Sines Tangent and Slope Unit and Tool Kit Review	
82			Formative assessment
83-94	The student will: 6.1 Solve problems using ratio and proportion including finding missing terms and writing equivalent proportions. 6.2 Determine whether given polygons are similar and identify corresponding parts. 6.3 Solve problems related to similar figures.	Unit 8 – Similarity (The Trekee clubhouse Logo) Ratios of corresponding Sides of Similar Triangles Similar Triangles Applications of Similar Triangles	

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	9.5 Solveproblems related to proportion with area and volume.	Comparing the Perimeter and Area of Similar Shapes Length, Area, and Volume Ratios for Similar Figures Applications of r::r^2:r^3, Part 1 Applications of r::r^2:r^3, Part 2 Triangle Similarity Theorems Unit and Tool Kit Review	
95			Formative assessment
96-106	The student will: 4.1 Solve problems related to the measures of the interior and exterior angles of polygons. 4.2 Solve problems related to properties of quadrilaterals. 9.1 Solve problems related to areas of polygons, including the area of triangles, squares, rectangles, parallelograms, and trapezoids.	Unit 9 – Polygons, Area, and Proof (Urban Sprawl) Interior Angles of Polygons Regular Polygons Exterior Angles Finding Areas of Polygons by Dissection Areas of A Regular Polygon Proof With Polygons Properties of Quadrilaterals Quadrilateral Proofs Unit and Tool Kit Review Describing Quadrilaterals From Their Diagonals	
107			Formative assessment

Day	Performance Standard	Instructional Materials	Evaluation
108-118	The student will: 8.1 Draw and label figures to illustrate definitions for chords, diameters, secants, tangents, inscribed angles, and central angles.. 8.2 Solve problems related to properties for tangents of circles. 8.3 Solve problems related to properties of chords. 8.4 Solve problems related to properties of arcs and angles. 9.2 Solve problems related to area of circles. 9.5 Find the volume of prisms, pyramids, cylinders, cones, and spheres.	Unit 10 – Circles and Solids (The One-Eyed Jack Mine) Angles and Arcs Inscribed Angles and Intercepted Arcs Tangents and Radii Diameter-Chord Investigation Using the Circle Theorems Prisms and Cylinders Pyramids Cones	
119			Formative assessment
119-127	The student will: 8.3 Solve problems related to properties of chords. 8.4 Solve problems related to properties of arcs and angles. Algebra I The student will: 9.1 Simplify algebraic fractions. 9.2 Multiply and divided algebraic fractions. 9.3 Add and subtract algebraic fractions.	Unit 11 – 3D and Circles (Going Camping) Surface Area and Volume The Soda Can: Geometry in Industry Angles, Chords, and Secants The Equation of a Circle Course Conclusion and Tool Kit Review	
128			Formative assessment
129-132	The student will:	Appendix - Construction	

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	11.1 Performa basic geometric constructions involving congruencies, bisectors, perpendiculars, and parallels. 11.2 Apply geometric constructions to the solution of problems.		
133			Summative assessment