2017-2018 WCSD Geometry/Formal Geometry Program Evaluation Rubric

Evaluator Number

12

Program Number

6

Name of Text

Geometry: A Common Core Curriculum

Publisher

Big Ideas Learning, LLC.

Rate This Text Overall

- [x] **High**
- [ ] **Mid**
- [ ] **Low**

Focus: Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons. (Both student and teacher materials)

- ⇨ Basic Terms and Constructions (G.CO.1, G.CO.12)
- ⇨ The Distance Formula (G.GPE.7)
- ⇨ The Midpoint Formula (G.GPE.7)
- ⇨ Angle Measure
- ⇨ Angles (G.CO.1, G.CO.12)
- ⇨ Inductive Reasoning and Conjecture
- ⇨ Conditional Statements
- ⇨ Deductive Reasoning
- ⇨ Postulates
- ⇨ Algebraic
- ⇨ Segment Addition Postulate
- ⇨ Proving Angle Relationships
- ⇨ Parallel and Perpendicular Lines (G.CO.1, G.CO.12)
- ⇨ Partitioning a Segment (G.GPE.6)
- ⇨ Slope and Parallel Lines (G.GPE.5)
- ⇨ Slope and Perpendicular Lines (G.GPE.5)
- ⇨ Proofs About Line Segments and Angles (G.CO.9)
- ⇨ Proofs About Parallel and Perpendicular Lines (G.CO.9)
- ⇨ Perpendiculars and Distance (G.CO.1)
- ⇨ Transformations and Rigid Motions (G.CO.2)
- ⇨ Reflections (G.CO.2, G.CO.4, **G.CO.5,** G.CO.6)
- ⇨ Translations (G.CO.2, G.CO.4, **G.CO.5**, G.CO.6)
- ⇨ Rotations (G.CO.2, G.CO.4, **G.CO.5**, G.CO.6)
- ⇨ Compositions of transformations (G.CO.6)
- ⇨ Introduce basic dilations
- ⇨ Congruence and Triangles (**G.CO.5**, G.CO.6, G.CO.7)
- ⇨ Developing Congruence Criteria (G.CO.7, G.CO.8)
- ⇨ Using Congruence Criteria in Proofs (**G.SRT.5**)
- ⇨ The Triangle Sum Theorem (**G.CO.10**)
- ⇨ The Isosceles Triangle Theorem (**G.CO.10**)
- ⇨ Congruence (Proofs involving triangle congruence, corresponding parts of triangles) (**G.CO.5,** G.CO.6)
- ⇨ Angle Bisectors (G.CO.2, G.CO.9, **G.C.3**) – (construct Angle Bisectors of triangle, Incenter and Circle)
- ⇨ Perpendicular Bisectors (G.CO.2, G.CO.9, **G.C.3**) – (construct Perpendicular Bisectors of Triangle, Circumcenter & Circle)

- Medians of a Triangle (G.CO.10, G.GPE.4) – (no need for centroid and orthocenter)
- Indirect Proofs
- Triangle Inequality
- Inequalities in Two Triangles
- Ratios, Proportions, and Similarity (**G.SRT.2**, G.C.1)
- Similarity and Triangles (**G.SRT.2**, G.SRT.3)
- Solving Problems Using Similarity (**G.SRT.5**)
- Properties of Dilations - positive and negative dilations (G.SRT.1, G.CO.2)
- Drawing Dilations (G.CO.2)
- A line parallel to one side of a triangle divides the other two proportionally, and conversely (G.SRT.4, **G.SRT.5**)
- Midsegment of a Triangle (G.CO.10)
- Geometric Mean - (**G.SRT.5**) (derive formulas-no shortcuts)
- Proving the Pythagorean Theorem (G.SRT.4, **G.SRT.5**)
- Similarity (proofs throughout unit)
- Understand Triangle Similarity lead to definitions of the Trig Ratios (**G.SRT.6, G.SRT.7**)
- Through the use of similar triangles derive the Special Right Triangles (G.SRT.4, **G.SRT.5**)
- Solving Right Triangles (**G.SRT.8**)
- The Law of Sines and Cosines (G.SRT.10+, G.SRT.11+)
- Symmetry (**G.CO.3**)
- Sides and Angles of Parallelograms (**G.CO.3**, **G.CO.11**)
- Diagonals of Parallelograms (**G.CO.11**)
- Criteria for Parallelograms -Parallelograms (proofs throughout unit) (**G.CO.11**)
- Special Parallelograms (**G.CO.11**, G.CO.13, **G.SRT.5**)
- Kites and Trapezoids
- Derive area of the equilateral triangle (inscribed in a circle) (G.CO.13)
- Derive areas of polygons (inscribed in a circle) – solve for apothem (**G.SRT.8,** G.CO.13)
  (Use trig ratios and the Pythagorean Theorem to solve right triangles in applied problems)
- Coordinate Proofs - Distance, midpoint, slope, polygons, area (**G.CO.10**, G.GPE.4, G.GPE.7)
- Give an informal argument for the formulas for the circumference and area of a circle. (G.GMD.1)
- Central Angles and Inscribed Angles (**G.C.2**)
- Prove properties of angles for a quadrilateral inscribed in a circle. (**G.C.3**)
- Segments in circles (**G.C.2,** G.C.4+)
- Inscribed and Circumscribed Circles of triangles (Examine the relationships in the circle) (G.C.3)
- Circumference and Arc Length (G.CO.1, G.C.5)
- Area of Circles and Sectors (G.C.5)
- Visualizing Three-Dimensional Figures (G.GMD.4)
- Surface Area (use nets and find surface area of figures with regular polygonal bases) (7.G.6, **G.SRT.8**)
- Volume of Prisms and Cylinders (7.G.6, 8.G.9, **G.GMD.1, G.GMD.3**)
- Volumes of Pyramids and Cones (8.G.9, **G.GMD.1, G.GMD.3**)
- Volume of Spheres (8.G.9, G.GMD.2+, **G.GMD.3**)
- Solving Design Problems (**G.GMD.3**, G.MG.3)
- Probability and Set Theory (S.CP.1)
- Mutually Exclusive and Overlapping Events (**S.CP.7**)
- Understand the conditional probability of A given B (**S.CP.3**)
- Construct and interpret two-way frequency tables of data (**S.CP.4**)
- Independent Events (**S.CP.2, S.CP.3, S.CP.4,** S.CP.5)

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Formal

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- ○ Less than 85% but greater than 50%
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Additional Comments (overall impression of the text)

ExamView allows for unlimited online customized tests and practice tests from a test bank. The back of the book contains a list of theorems, properties, and postulates, as well as formulas and conversions: extremely beneficial.
A lot of supplemental resources are available: Skills Review and Basic Skills Handbook (for struggling and low math ability students), an Assessment Book (complete with Prerequisite Skills Tests, Pre-Course Tests with Item Analysis, Quizzes, Chapter Tests, Alternative Assessments, Performance Tasks, Cumulative Tests, and Post-Course Tests with Item Analysis), Resources by Chapter book (which includes family communication letters, warm ups, reviews, enrichments & extensions, puzzle time, and extra practice), and a Student