

Mathematics: Geometry L2 - Modified from [Unit D - Polygons](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: the corresponding sides of similar polygons are proportional and the corresponding angles are congruent, AA~ for triangles, the ratio of the perimeter of two similar polygons equals the ratio of any pair of corresponding sides, if a line is parallel to one side of a triangle and intersects the other two sides, it divides those sides proportionally, if three or more parallel lines are intersected by two transversals, the parallel lines divide the transversals proportionally if a ray bisects an angle of a triangle, it divides the opposite side into segments that are proportional to the adjacent sides

Vocabulary: exterior angle, interior angle, diagonal, similar, dilation, reduction

Skills: solving regular polygon problems involving angles, applying the Midline Theorem, using AAS to find triangles congruent, identifying whether a pair of polygons is similar, using proportional reasoning and congruent corresponding angles to find missing dimensions of similar polygons, applying theorems involving proportionality

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: 8.3 Methods of proving similarity	Khan - Similarity Postulates Khan - Solving Similar Triangles	Book Assignment(8.3): Pages 341-342, #s 3, 8-10 Khan Exercises-Solving Similar Polygons Exercise 1 Exercise 2
Tuesday: 8.4 CSSTP/CASTC/Mean's Theorems	8.4CSSTP, CASTC, MET	Book Assignment Pages 347-350, #'s 1, 2, 8-12, 17
Wednesday: 8.4 Word Problems	8.4 Word Problems	Book Assignment Word Problems (8.4): Pages 348-350, #s 9, 10, 14, 20
Thursday:	8.5 Three Theorems Involving Proportions	Book Assignment Word Problems (8.5): Pages

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
8.5 Three Theorems	video	355-356, #s 3, 4, 6, 8, 14, 20, 21, 29, 30
Friday: Chapter 8 Wrap / Catch Up	Chapter 8 Review doc	Chapter 8 Review doc

Week criteria for success (attach student checklists or rubrics):

- Use several methods to prove that triangles are similar
- Use the concept of similarity to establish the congruence of angles and proportionality of segments
- Apply the three theorems that are frequently used to establish proportionality

Supportive resources and tutorials for the week (plans for re-teaching): Khan Academy, Kuta Software worksheets, office hours

remediation material for similar polygons

Chapter 8 Extra Review WS