

The Common Denominator

A Family Math Newsletter
Geometry Unit 5: Triangle Congruence

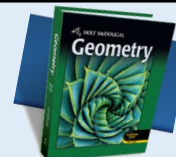
Unit at a Glance



The fundamental concept of proof continues throughout the Triangle Congruence unit. Students focus on triangle classifications and proving triangles congruent. The formal structure of proofs progresses, as students develop and explain triangle criteria; ASA, SSS, and SAS. Students will use these concepts to prove other theorems pertaining to triangles. Students will also discover, generalize, and use properties of isosceles and equilateral triangles to complete more complex proofs. The following topics will be studied:

Topic	Length	Geometry Text Section(s)
Topic A: Classifying Triangles; Angle Relationships and Triangles	Academic: 1 (90-minute) lesson Honors: 1 (90-minute) lesson	4.1 – 4.2
Topic B: Congruent Triangles; Triangle Congruence SSS, SAS, ASA, AAS, HL	Academic: 3 (90-minute) lessons Honors: 3 (90-minute) lessons	4.3 – 4.5
Topic C: Triangle Congruence: CPCTC	Academic: 1.5 (90-minute) lessons Honors: 1.5 (90-minute) lessons	4.6
Topic D: Introduction to Coordinate Proof	Academic: N/A (90-minute) lesson Honors: 1 (90-minute) lesson	4.7
Topic E: Isosceles and Equilateral Triangles	Academic: 1 (90-minute) lesson Honors: 1 (90-minute) lesson	4.8

Resource Toolkit



Homework Help

Digital resources exist in the HMH online textbook that can support student learning outside of the classroom. To access these resources, students can log into HMH through BCPSone Digital Content, then select “Student Resources”. The “Homework Helper” resource has a mini-lesson, then guided practice problems for students to complete that can help reinforce concepts that were learned in class. Also, check the “Videos & Activities” section where other beneficial resources can be found.

Khan Academy Videos

Topic B: [Congruent Triangles & the SSS Postulate/Criterion](#) and [Triangle Congruence Postulates/Criteria](#)

Topic E: [Proofs Concerning Isosceles Triangles](#) and [Proofs Concerning Equilateral Triangles](#)

Exploring Mathematics

Real-world Applications

Congruent figures are all around. Many floors and mosaics make use of congruent figures by tiling, called tessellations in mathematics. MC Escher is an artist famous for his use of tessellations to create works of art. Check out this [Shodor Tessellation Applet](#) and get started creating your own digital tessellation or watch this YouTube video [How To Create A Tessellation](#) to create one with paper and pencil.

Watch this YouTube video on [The Complex Geometry of Islamic Design](#).



“I try to make my mood uplifting and peaceful, then watch the world around me reflect that mood.”

– Yaya Da Costa