

Lesson 3.1 Congruency in Triangles: Proving Shortcuts

I may not always prove triangles congruent, but when I do, I use SAS!



Benchmark(s):

9.3.3.6 Know and apply properties of congruent and similar figures to solve problems and logically justify results.

9.3.2.1 Understand the roles of axioms, definitions, undefined terms and theorems in logical arguments.

9.3.2.3 Assess the validity of a logical argument and give counterexamples to disprove a statement.

9.3.2.4 Construct logical arguments and write proofs of theorems and other results in geometry, including proofs by contradiction. Express proofs in a form that clearly justifies the reasoning, such as two-column proofs, paragraph proofs, flow charts or illustrations.

Essential Question(s):

How many facts must we know to prove two triangles congruent?

Learning Target(s):

I can use logical reasoning, definitions, postulates and theorems to support conclusions.

Activity: Finding Mister Right using [Proving Triangle Shortcuts Applet](#) interactive illuminations activity (requires Flash).