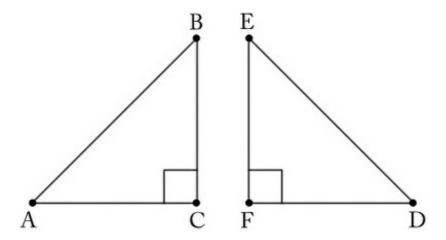


G-CO When Does SSA Work to Determine Triangle Congruence?

Task

Josh is told that two triangles ABC and DEF share two sets of congruent sides and one pair of congruent angles: AB is congruent to DE, BC congruent to EF, and angle C is congruent to angle F. He is asked if these two triangles must be congruent. Josh draws the two triangles below and says "They are definitely congruent because they share all three side lengths!"



a. Explain Josh's reasoning using one of the triangle congruence criteria: ASA, SSS, SAS.

b. Give an example of two triangles ABC and DEF, fitting the criteria of this problem, which are not congruent.





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