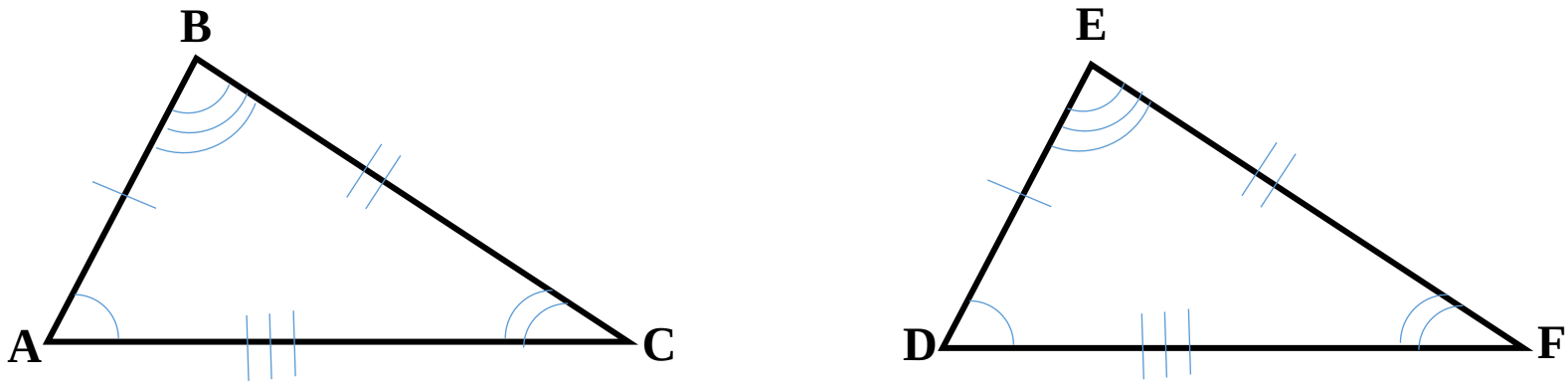
Congruence of Triangles:

Two triangles are congruent if the corresponding angles and sides are congruent.

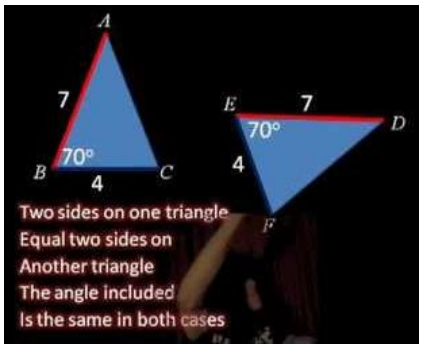


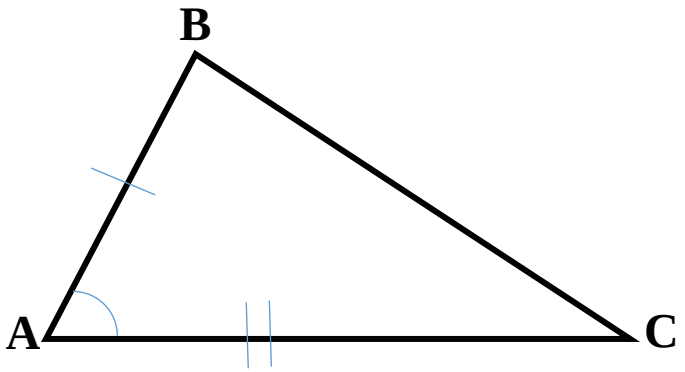
$$\Delta ABC \cong \Delta DEF$$

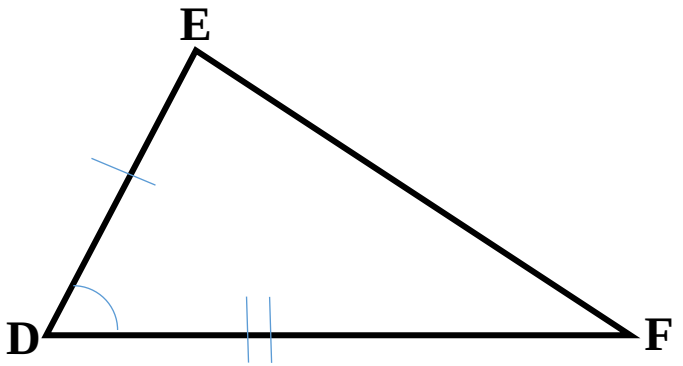
6 things must be congruent in order for the two triangles to be congruent.

When is a fewer number of congruences enough to conclude that all 6 are congruent?

Side-Angle-Side(SAS) Congruence:

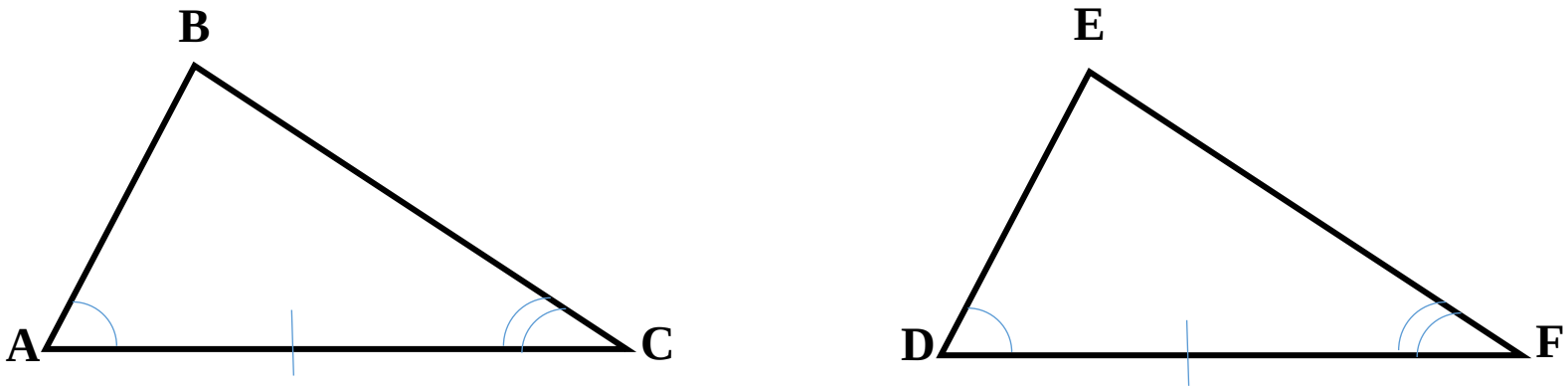






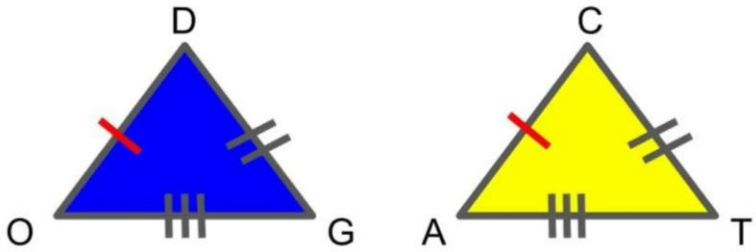
$$\Delta ABC \cong \Delta DEF$$

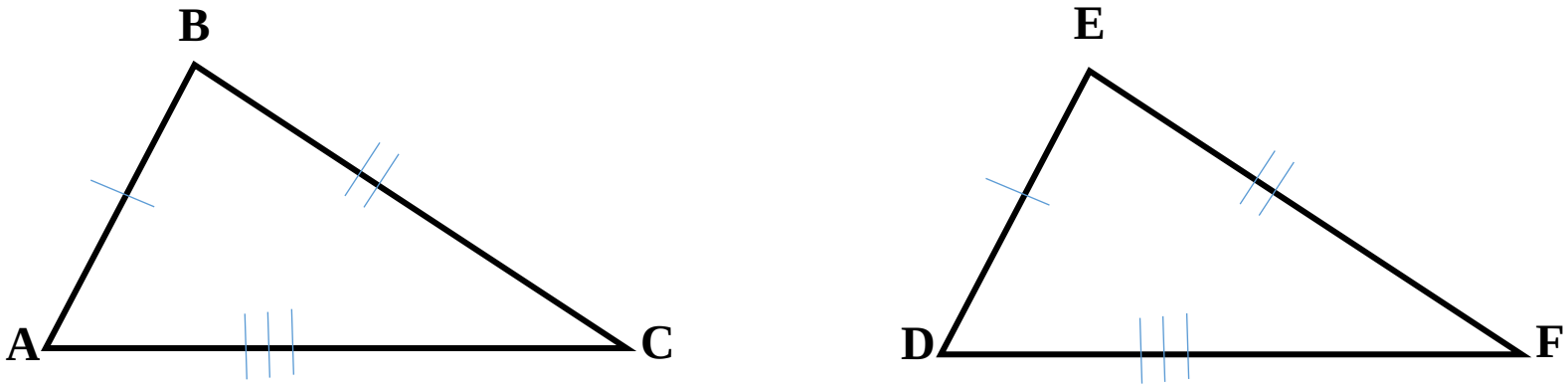
Angle-Side-Angle(ASA) Congruence:



$\Delta ABC \cong \Delta DEF$

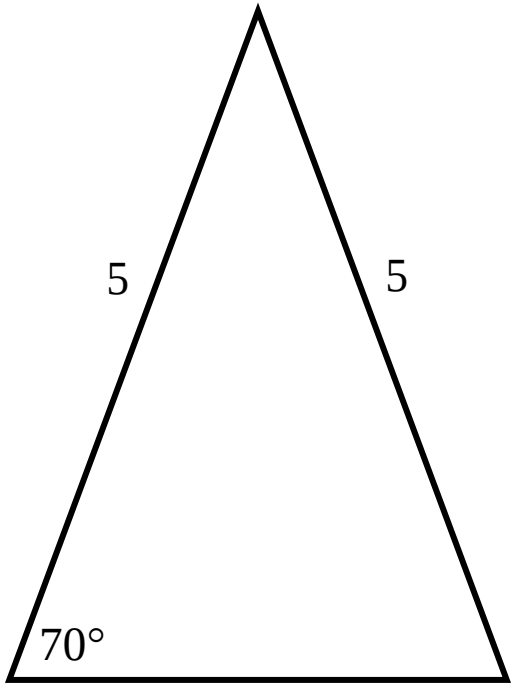
Side-Side-Side(SSS) Congruence:

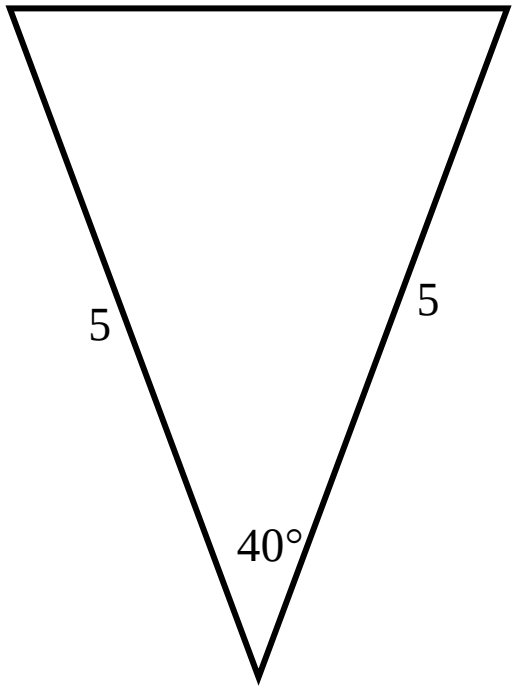


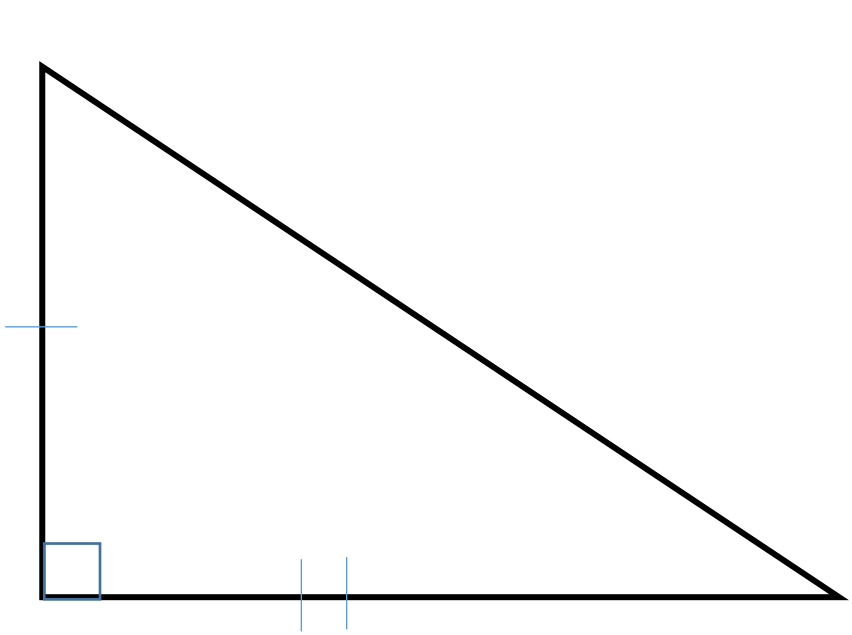


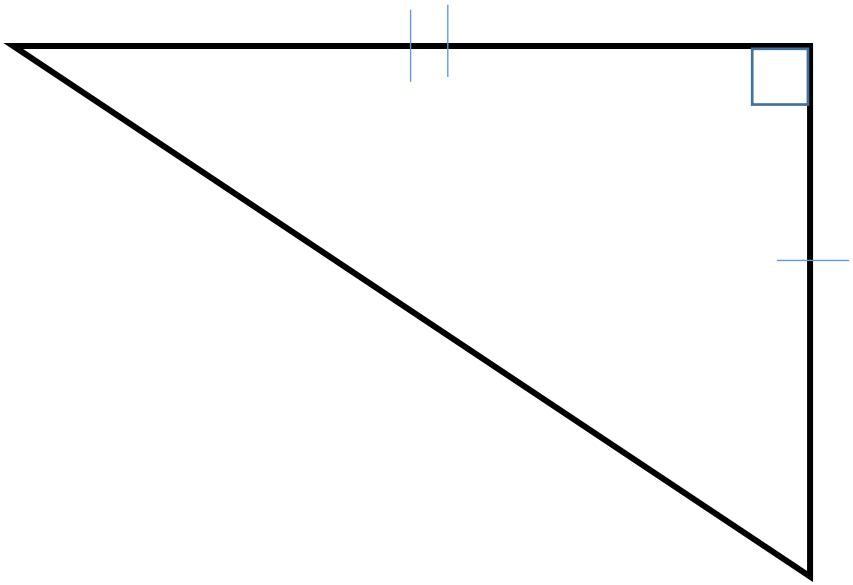
$\Delta ABC \cong \Delta DEF$

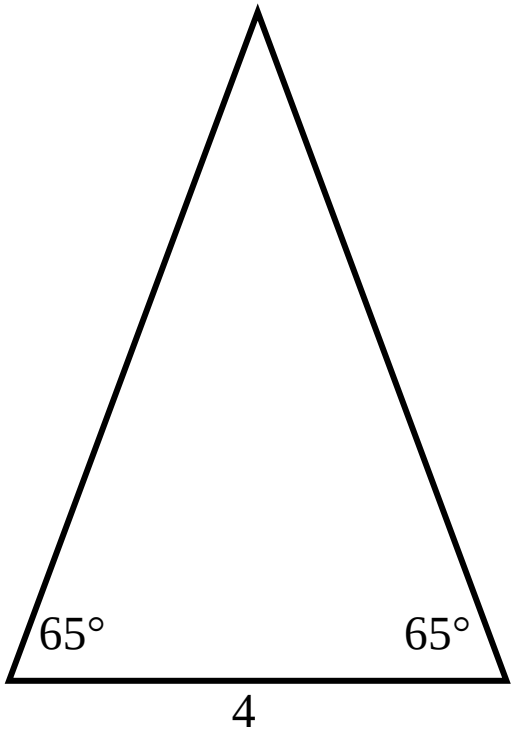
Determine if the following pairs of triangles are congruent:

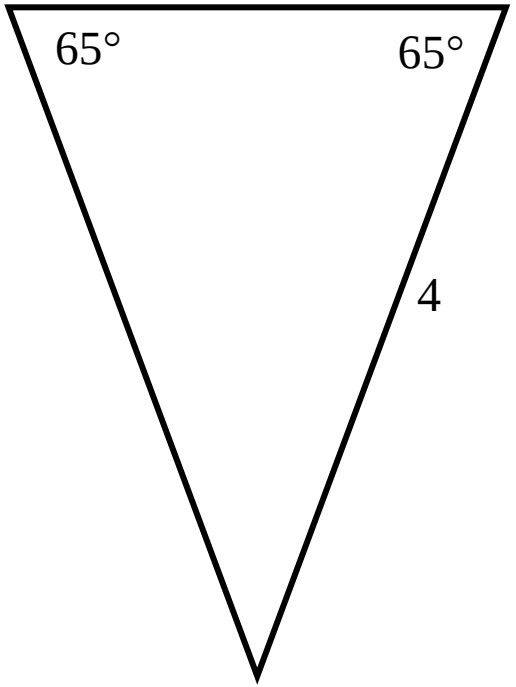


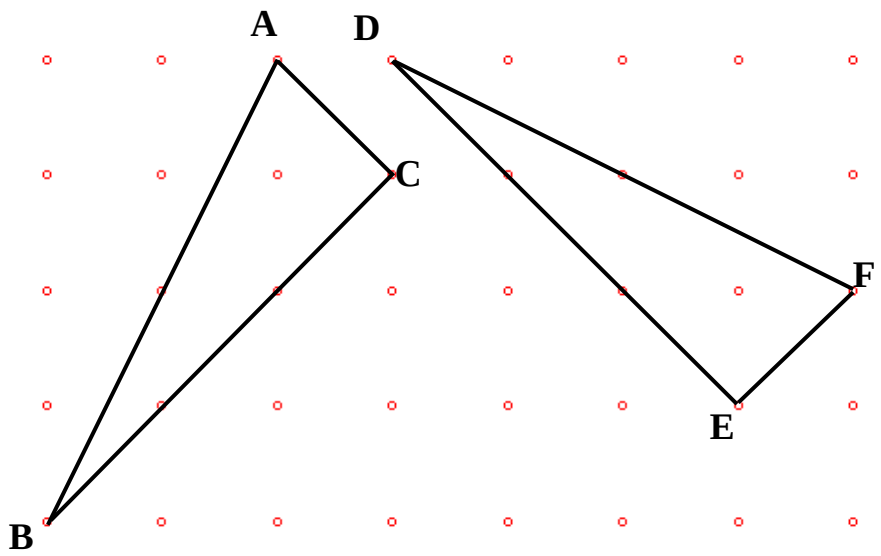







65°
65°
4


65°
65°
4


A
D
C
F
E
B