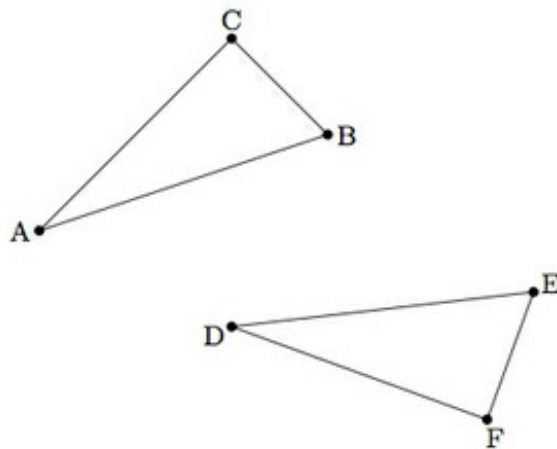


G-CO SSS Congruence Criterion

Task

Suppose $\triangle ABC$ and $\triangle DEF$ share three corresponding congruent sides as pictured below:



Show that $\triangle ABC$ is congruent to $\triangle DEF$ as follows:

- Apply a translation to move $\triangle ABC$ to $\triangle A'B'C'$ with $A' = D$.
- Apply a rotation to move $\triangle A'B'C'$ to $\triangle A''B''C''$ with $A'' = D$ and $B'' = E$.
- Explain why $|A''C''| = |DF|$ and conclude that \overleftrightarrow{DE} is the perpendicular bisector of $\overline{C''F}$.
- Show that reflection over \overleftrightarrow{DE} maps F to C'' and conclude that $\triangle ABC$ is congruent

to $\triangle DEF$.



G-CO SSS Congruence Criterion

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