Properties of Congruent Triangles

Properties of Congruence of Triangles

Reflexive Property

Symmetric Property

Transitive Property

Statements	Reasons

Reflexive Property

Given: ΔABC
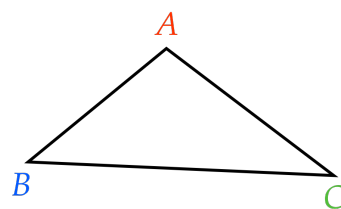
Prove: $\Delta ABC \cong \Delta ABC$

Statements	Reasons

Symmetric Property

Given: $\triangle ABC \cong \triangle XYZ$

Prove: $\triangle XYZ \cong \triangle ABC$
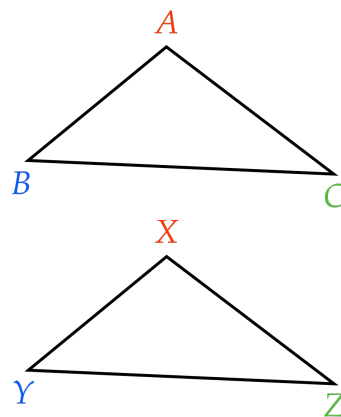
Statements	Reasons

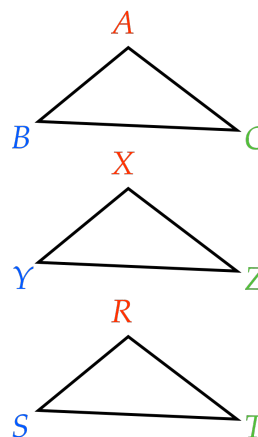### Transitive Property

Given: $\triangle ABC \cong \triangle XYZ$ and
$\qquad \triangle XYZ \cong \triangle RST$

Prove: $\triangle ABC \cong \triangle RST$

Properties of Congruence of Triangles

Reflexive Property

$\Delta ABC \cong \Delta ABC$

Symmetric Property

if $\Delta ABC \cong \Delta XYZ$,

then $\Delta XYZ \cong \Delta ABC$.

Transitive Property

if $\Delta ABC \cong \Delta XYZ$ and $\Delta XYZ \cong \Delta RST$,

then $\Delta ABC \cong \Delta RST$.