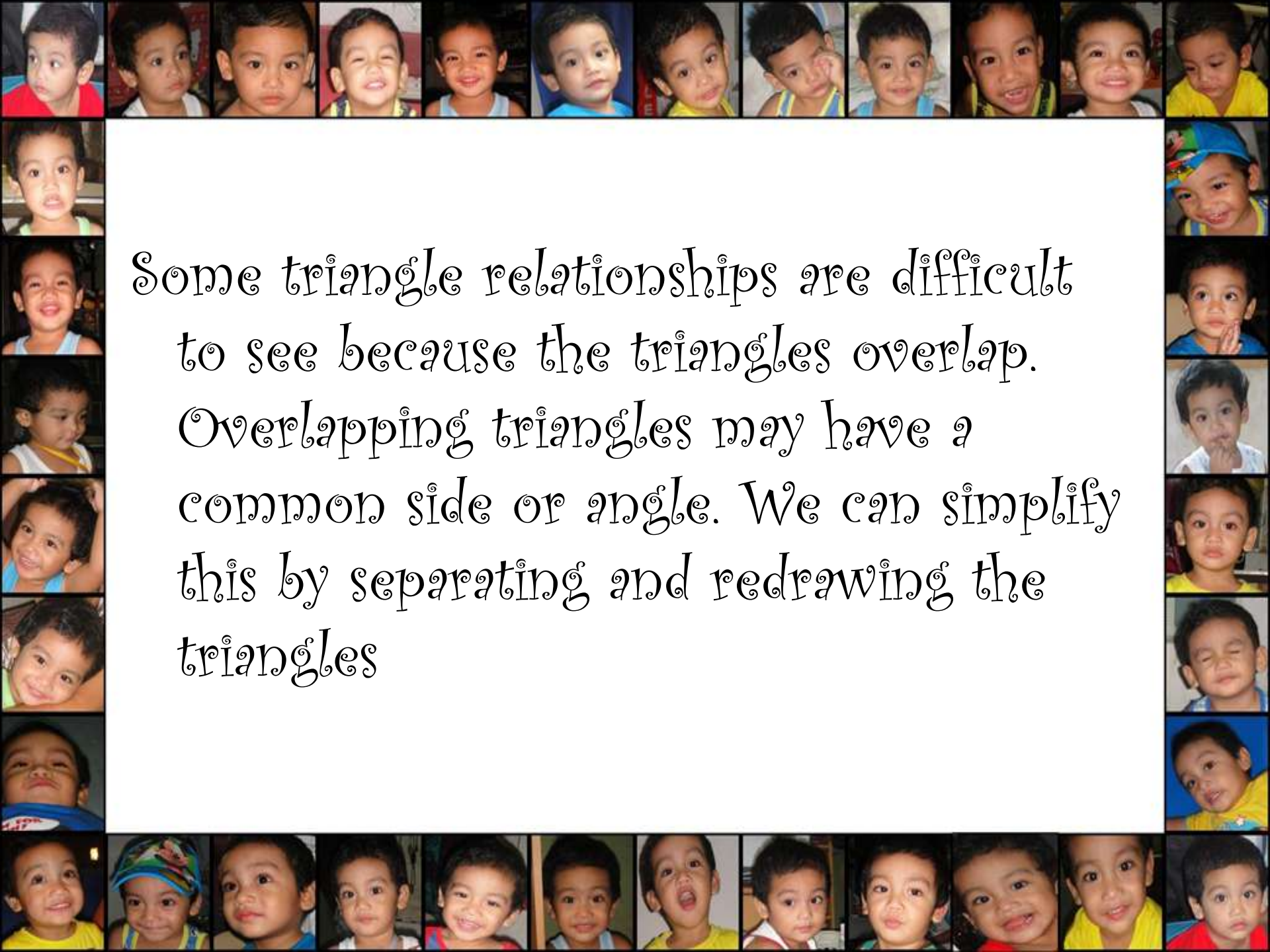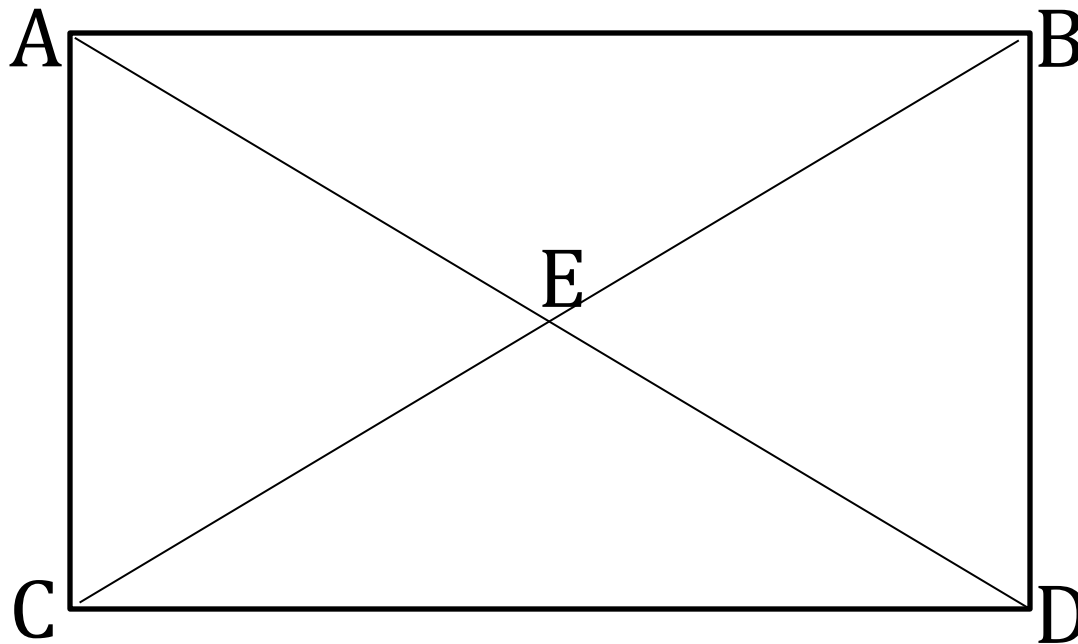# Using Corresponding Parts of Congruent Triangles

Some triangle relationships are difficult to see because the triangles overlap. Overlapping triangles may have a common side or angle. We can simplify this by separating and redrawing the triangles
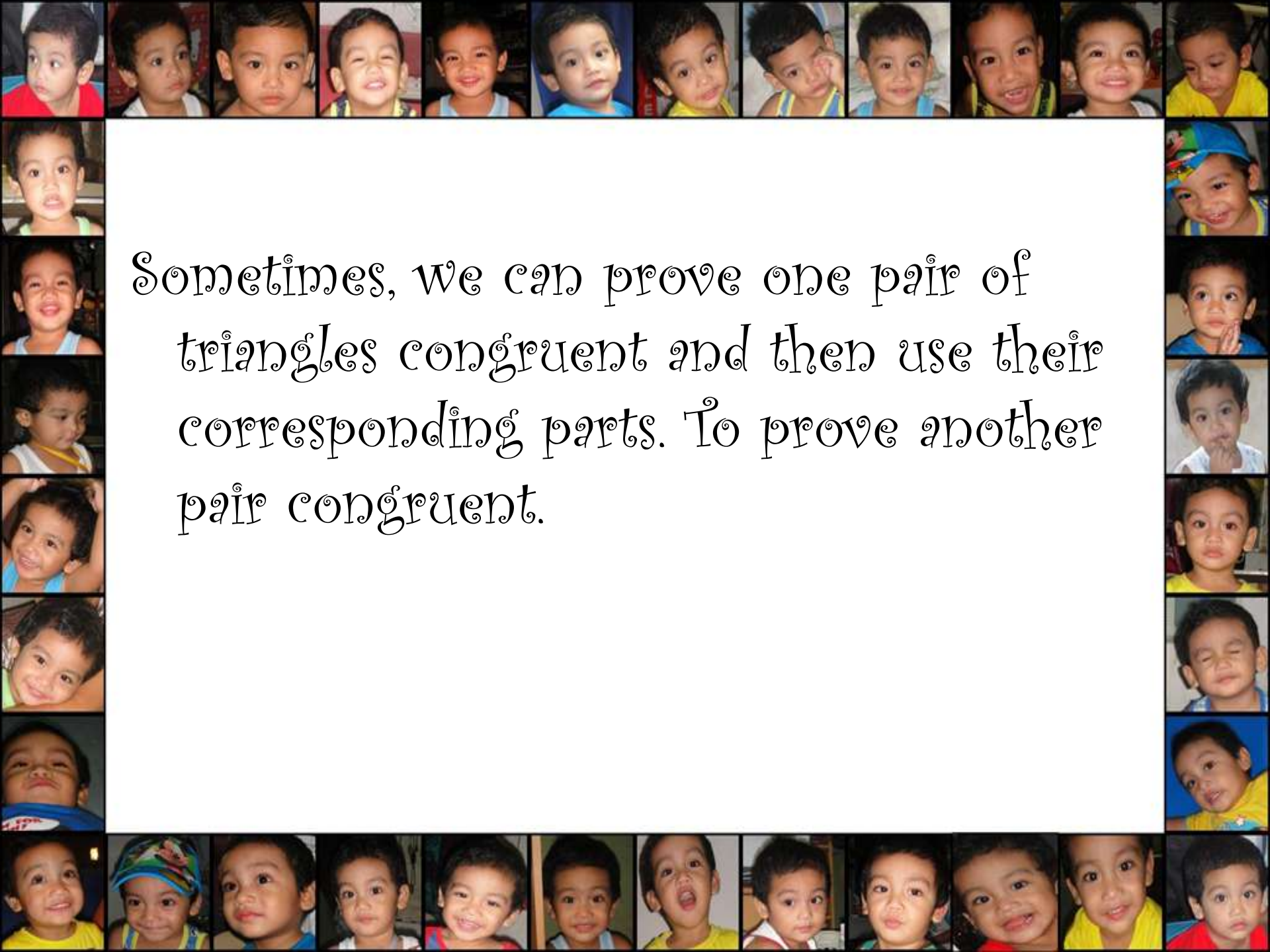
In overlapping triangles, a common side or angle is congruent to itself by the reflexive property of congruence.
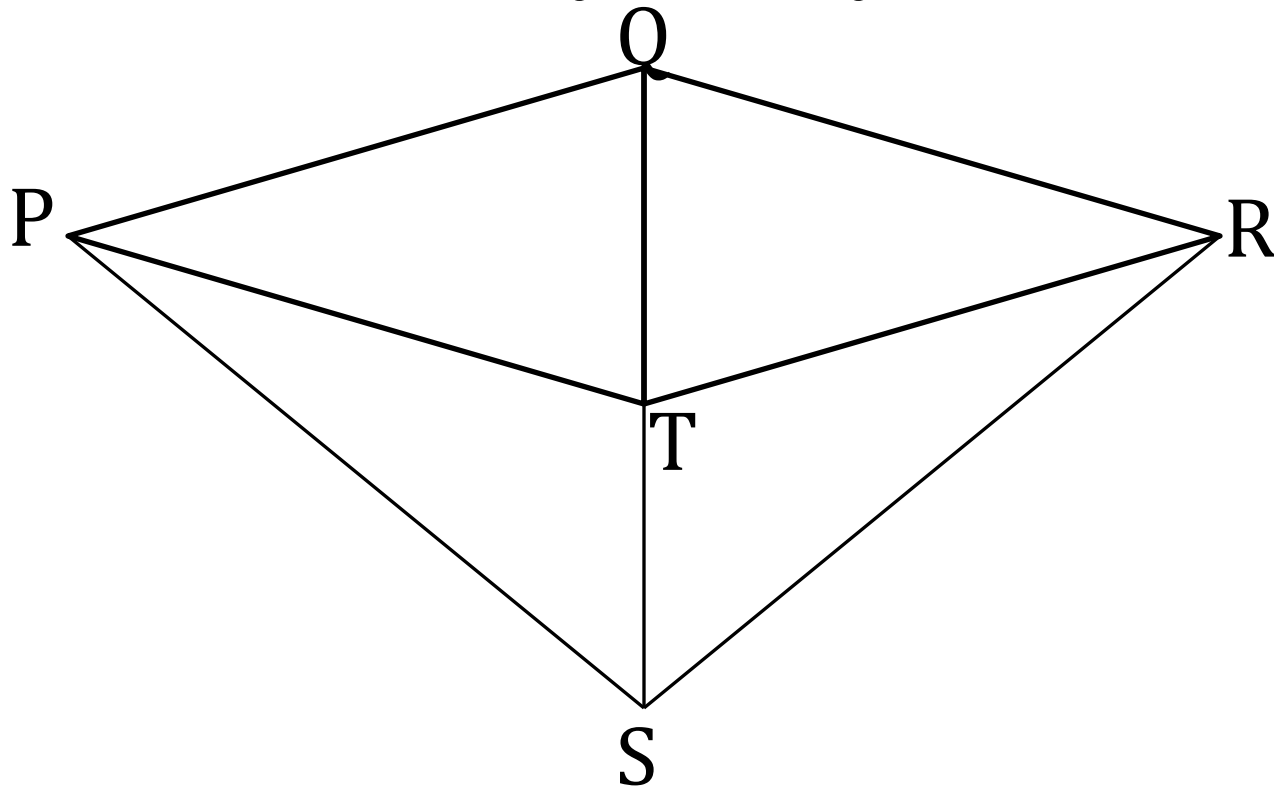
Given: $\Delta ACD \cong \Delta BDC$

Prove: $\overline{CE} \cong \overline{DE}$

Sometimes, we can prove one pair of triangles congruent and then use their corresponding parts. To prove another pair congruent.

Given: $\overline{PS} \cong \overline{RS}$, $\angle PSQ \cong \angle RSQ$

Prove: $\Delta QPT \cong \Delta QRT$