

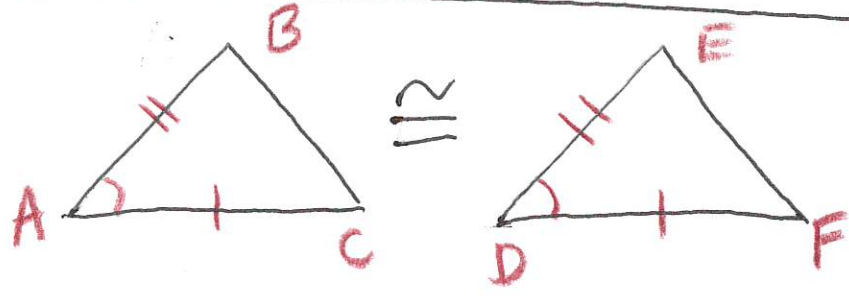
ES: What is CPCTC?

Corresponding
Parts of
Congruent
Triangles are
Congruent

What does this mean?

If triangles are congruent then ALL other corresponding parts are congruent.

(ex)



by SAS \cong

Given

$$\overline{AB} \cong \overline{DE}$$

$$\angle A \cong \angle D$$

$$\overline{AC} \cong \overline{DF}$$

Other parts

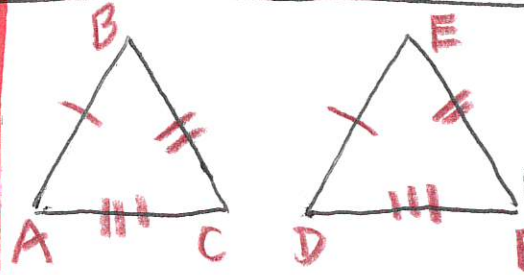
$$\angle B \cong \angle E$$

$$\angle C \cong \angle F$$

$$\overline{BC} \cong \overline{EF}$$

(ex)

How do we prove $\angle A \cong \angle D$?



Facts:

$$\overline{AB} \cong \overline{DE}$$

$$\overline{BC} \cong \overline{EF}$$

$$\overline{AC} \cong \overline{DF}$$

Reasons:

Given Given Given

Conclusion:

$$\triangle ABC \cong \triangle DEF \text{ by SSS } \cong$$

Prove:

$$\angle A \cong \angle D \text{ by CPCTC}$$

Summary