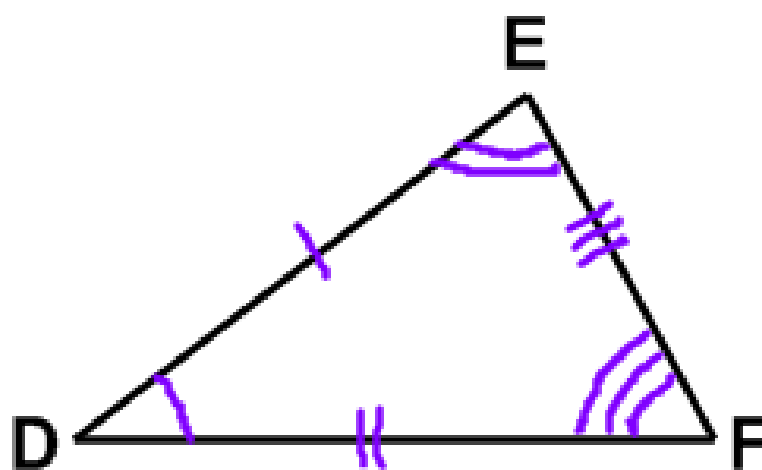
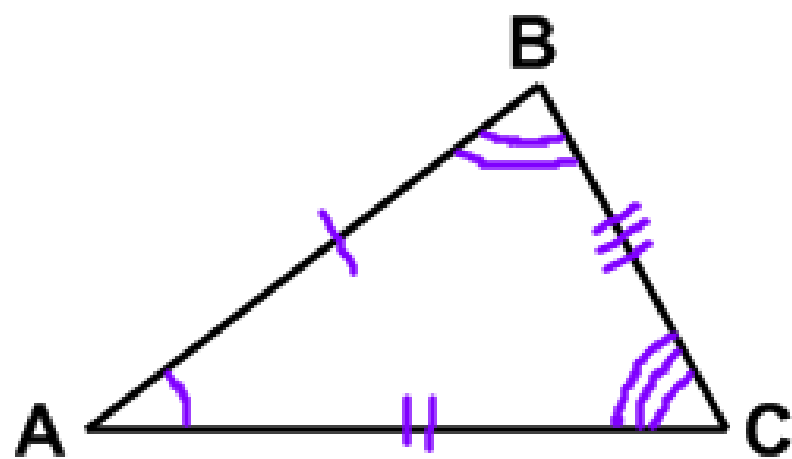


4 - 3

Congruent Triangles

congruent triangles: same size and
shape



$$\triangle ABC \cong \triangle DEF$$

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

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

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

$$\overline{BA} \cong \overline{ED}$$

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

$$\overline{CB} \cong \overline{FE}$$

****vertices MUST match up in order****

CPCTC:

↙
reason
in
proofs

corresponding
parts of
congruent
triangles are
congruent

****Congruence of triangles is...**

symmetric If $\triangle ABC \cong \triangle XYZ$, then
 $\triangle XYZ \cong \triangle ABC$.

reflexive $\triangle HIJ \cong \triangle HIJ$

transitive If $\triangle LDC \cong \triangle RST$ and
 $\triangle RST \cong \triangle MPQ$, then
 $\triangle LDC \cong \triangle MPQ$.

Are triangles still congruent after a...

translation? *yes*

reflection? *yes*

rotation? *yes*

dilation? *no*



Homework:

p.195 #9 - 13, 26, 27, 29, 30