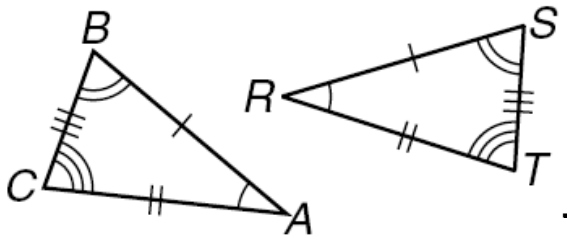
Name _____-_____ Notes 4-3 p. 1

Date _____

4-3 Corresponding Parts of Congruent Triangles

Triangles that have the _____ _____ and _____ _____ are _____ triangles.

Two triangles are_____ if and only if _____ _____ _____ of corresponding _____ are _____ and _____ _____ _____ of corresponding _____ are _____.



_____

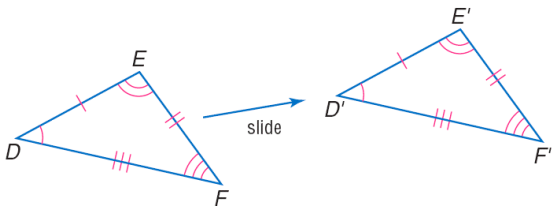
The _____ that are ≅ must be written in the _____ ___ _____ in a triangle congruence statement.

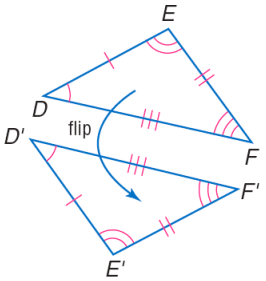
Angles are ≅: $\angle A \cong \angle R$, $\angle B \cong \angle S$, $\angle C \cong \angle T$

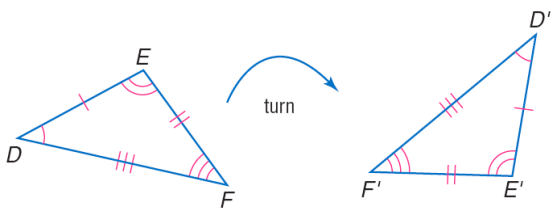
Sides are ≅: $\overline{AB} \cong \overline{RS}$, $\overline{BC} \cong \overline{ST}$, $\overline{CA} \cong \overline{TR}$

CPCTC: _____ _____ of _____ _____ are _____.

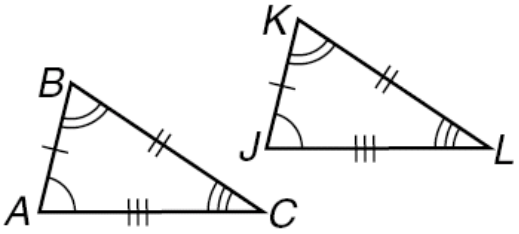
Identify Congruence Transformations: If two triangles are _____, you can _____, _____, or _____ one of the triangles and they will still be _____. These are called _____ _____ because they do not change the _____ or _____ of the figure. It is common to use prime symbols to distinguish between an original ΔDEF and a transformed $\Delta D'E'F'$.

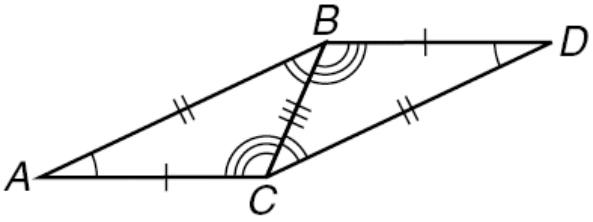


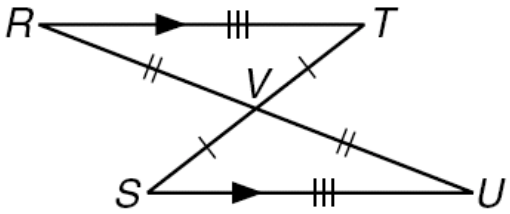




Identify the congruent triangles in each figure and name the corresponding congruent parts.

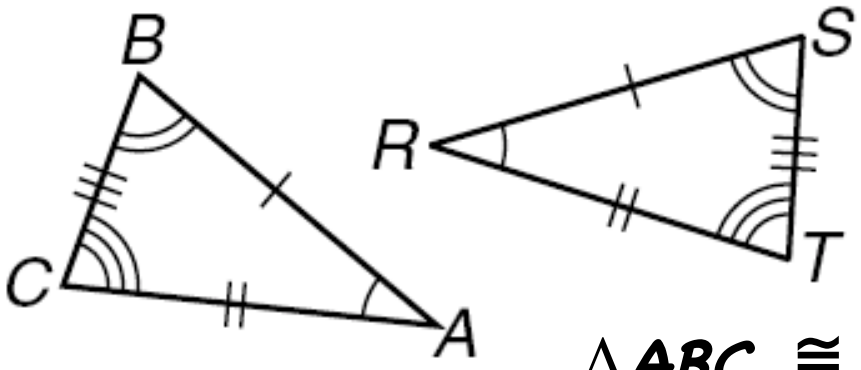






Corresponding Parts of Congruent Triangles

Triangles that have the **same size** and **same shape** are **congruent** triangles.
Two triangles are **congruent** if and only if **all three pairs** of corresponding **angles** are **congruent** and **all three pairs** of corresponding **sides** are **congruent**.



$\Delta ABC \cong \Delta RST$

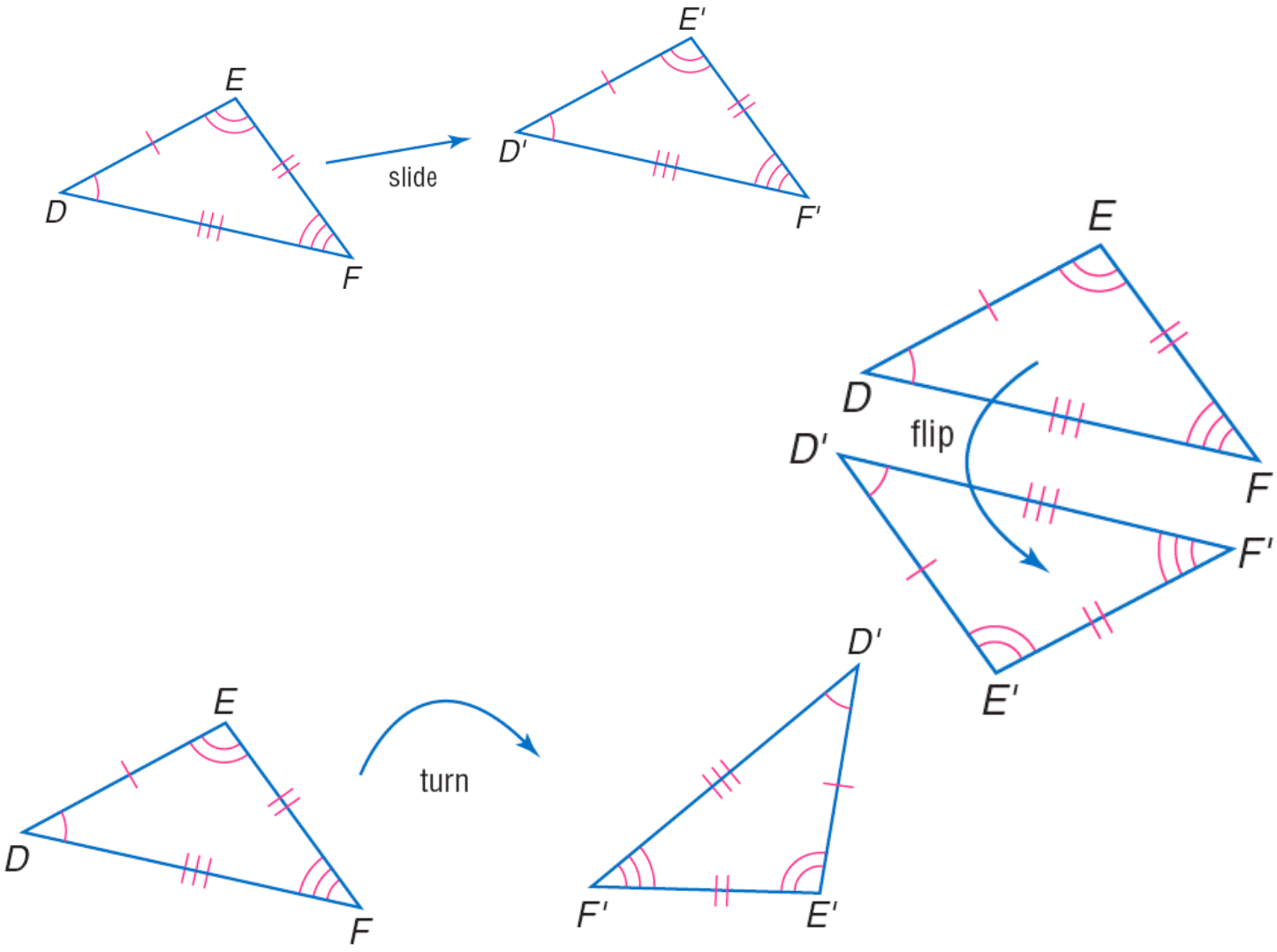
The **angles** that are $\cong$ must be written in the **order of congruence** in a triangle congruence statement.

Angles are $\cong$: $\angle A \cong \angle R$, $\angle B \cong \angle S$, $\angle C \cong \angle T$

Sides are $\cong$: $\overline{AB} \cong \overline{RS}$, $\overline{BC} \cong \overline{ST}$, $\overline{CA} \cong \overline{TR}$

CPCTC: **corresponding parts** of **congruent triangles** are **congruent**.

Identify Congruence Transformations: If two triangles are **congruent**, you can **slide**, **flip**, or **turn** one of the triangles and they will still be **congruent**. These are called **congruence transformations** because they do not change the **size** or **shape** of the figure. It is common to use prime symbols to distinguish between an original ΔDEF and a transformed $\Delta D'E'F'$.



Identify the congruent triangles in each figure and name the corresponding congruent parts.