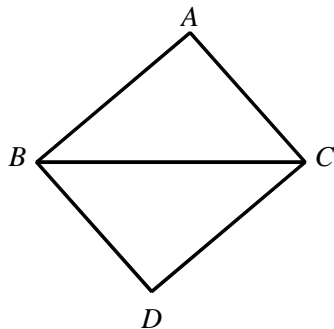


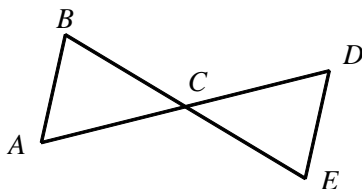
NAME: \_\_\_\_\_

*P.I. G.G.28: Determine the congruence of two triangles by using one of the five congruence techniques (SSS, SAS, ASA, AAS, HL), given sufficient information about the sides and/or angles of two congruent triangles*

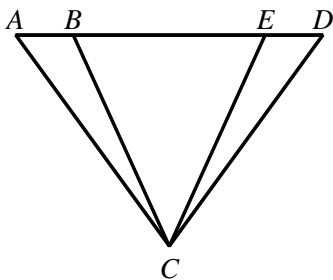
1. Given:  $\overline{AB} \cong \overline{DC}$  and  $\overline{AC} \cong \overline{DB}$ . Prove:  $\triangle ABC \cong \triangle DCB$ .



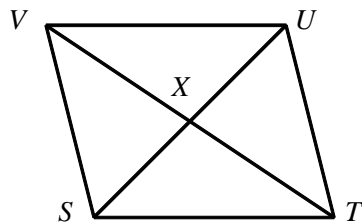
2.  $\overline{AC} \cong \overline{DC}$  and  $\overline{BC} \cong \overline{CE}$ . Prove  $\triangle ABC \cong \triangle DEC$ .



3.  $\overline{AC} \cong \overline{DC}$  and  $\overline{BA} \cong \overline{ED}$ . Prove  $\triangle ABC \cong \triangle DEC$ .



4. Given:  $\overline{SV} \cong \overline{TU}$  and  $\overline{SV} \parallel \overline{TU}$   
Prove:  $VX = XT$



[1]  $\overline{BC}$  is congruent to  $\overline{CB}$  by the reflexive property. So  $\triangle ABC$  is congruent to  $\triangle DCB$  by SSS.

[2]  $\angle ACB \cong \angle DCE$  because they are vertical angles. So  $\triangle ABC \cong \triangle DEC$  by SAS.

[3]  $\angle A \cong \angle D$  because they are base angles of isosceles  $\triangle CAD$ . So  $\triangle ABC \cong \triangle DEC$  by SAS.

1. $\overline{SV} \cong \overline{TU}$ and $\overline{SV} \parallel \overline{TU}$	1. Given
2. $STUV$ is a parallelogram	2. If one pair of opp. sides of a quad. are both $\parallel$ and $\cong$ , then the quad is a parallelogram.
3. $VX = XT$	3. The diagonals of a
[4] _____	parallelogram bisect each other.