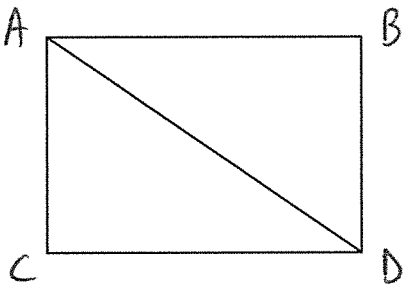


Proving Triangle Congruence by SAS & HL – Day 3
Unit 4: Similarities

Prove each of the following using an emphasis on Side-Angle-Side and Hypotenuse-Leg:

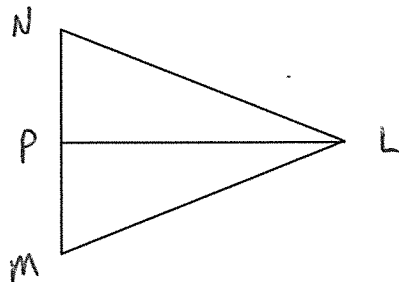
1. Given: $\overline{AB} \cong \overline{CD}$
 $\overline{AB} \parallel \overline{CD}$

Prove: $\triangle ACD \cong \triangle DBA$



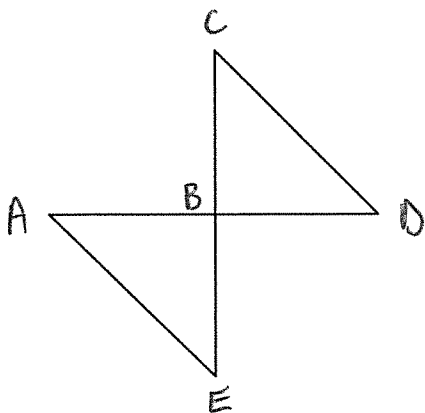
2. Given: P is the midpoint of MN
 $\overline{PL} \perp \overline{MN}$

Prove: $\triangle NPL \cong \triangle MPL$



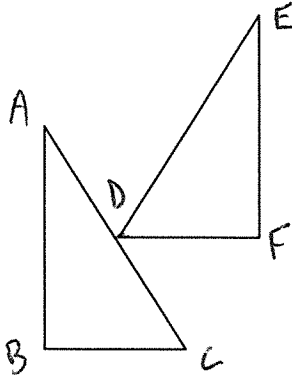
3. Given: $\overline{CD} \cong \overline{AE}$
 $\overline{AD} \perp \overline{CE}$
B is the midpoint of \overline{AD}

Prove: $\triangle BCD \cong \triangle BEA$



4. Given: $\overline{BC} \cong \overline{DF}$
 $\overline{AB} \perp \overline{BC}$
 $\overline{AC} \cong \overline{DE}$
 $\overline{EF} \perp \overline{DF}$

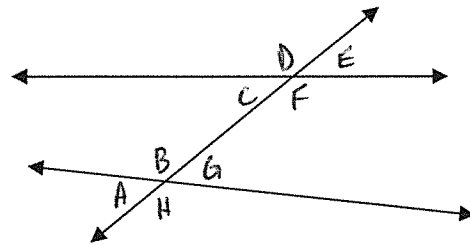
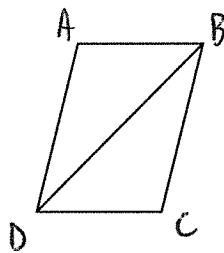
Prove: $\triangle ABC \cong \triangle EFD$



Prove each of the following using an emphasis on Side-Side-Side:

5. Given: $\overline{AD} \cong \overline{BC}$
 $\overline{AB} \cong \overline{CD}$

Prove: $\triangle BAD \cong \triangle DCB$



6a. Name all pairs of Corresponding Angles.

6b. Name all pairs of Alternate Interior Angles.

6c. Name all pairs of Alternate Exterior Angles.

6d. Name all pairs of Same-Side Interior Angles.

6e. Name all pairs of Vertical Angles.