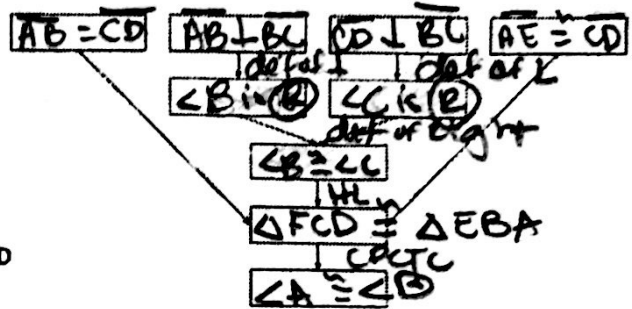
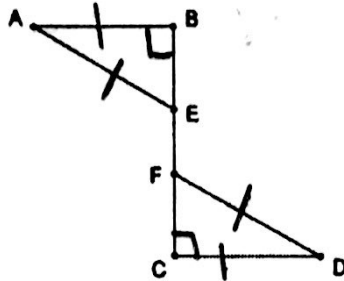


Day 8: Congruence Proofs

Complete these proofs on a separate sheet of paper. A small guideline of the flowcharts are provided.

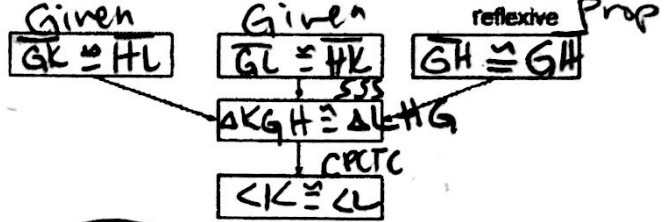
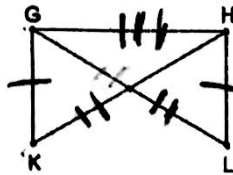
1. Given: $\overline{AB} \cong \overline{CD}$
 $\overline{AB} \perp \overline{BC}$
 $\overline{CD} \perp \overline{BC}$
 $\overline{AE} \cong \overline{CD}$

Prove: $\angle A \cong \angle D$



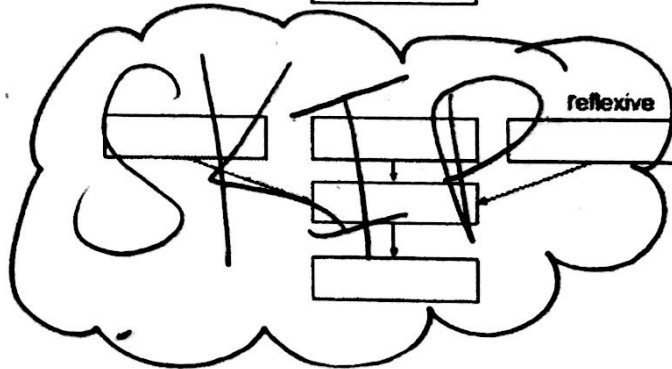
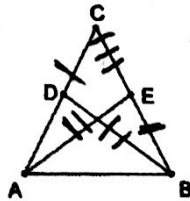
2. Given: $\overline{GK} \cong \overline{HL}$
 $\overline{GL} \cong \overline{HK}$

Prove: $\angle K \cong \angle L$



3. Given: $\overline{AC} \cong \overline{BC}$
 $\overline{AE} \cong \overline{BD}$

Prove: $\overline{CD} \cong \overline{CE}$



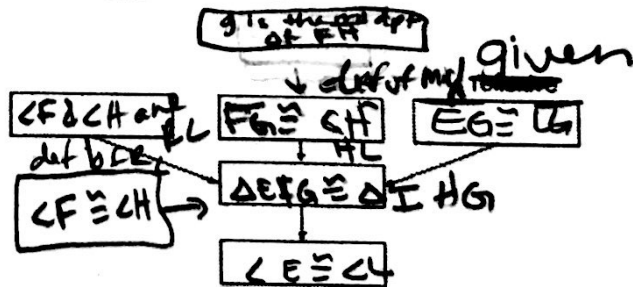
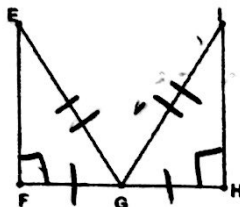
4. Given: $\angle F$ and $\angle H$ are right angles

G is the midpoint of \overline{FH}

$\overline{EG} \cong \overline{LG}$

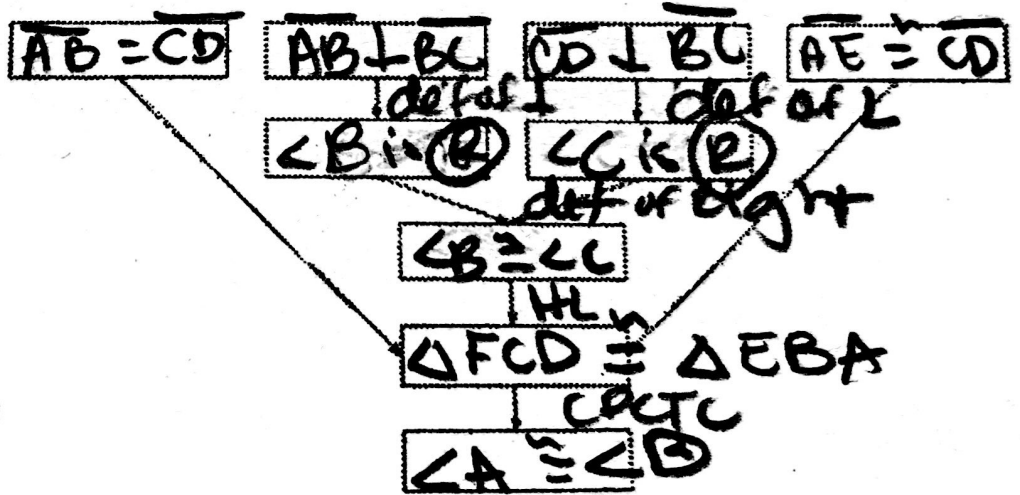
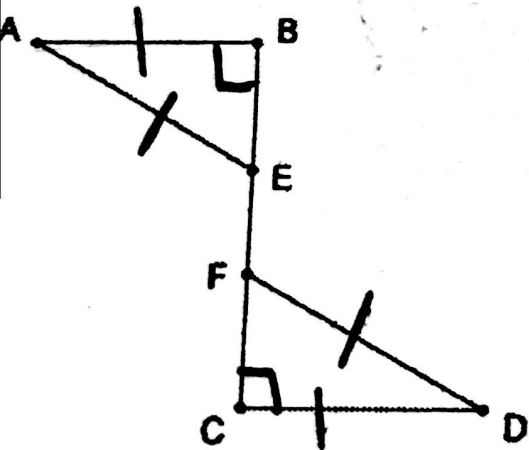
Prove: $\angle E \cong \angle L$

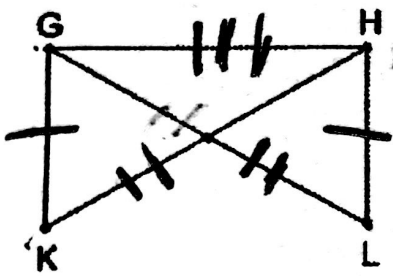
**HINT: Think about which shortcut applies to right triangles!



Day 8: Congruence Proofs

rate sheet of paper. A small guideline of the flowcharts are provided.





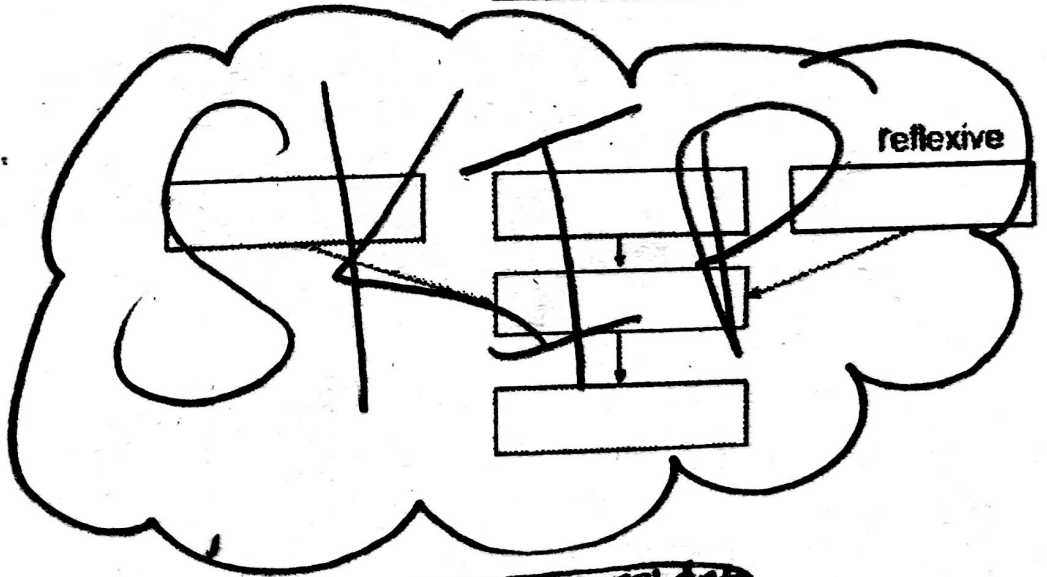
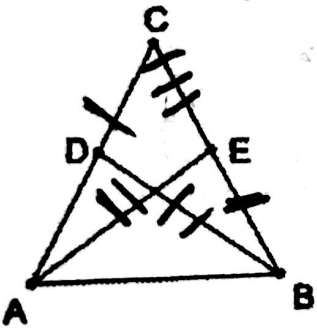
Given
 $\overline{GK} \cong \overline{HL}$

Given
 $\overline{GL} \cong \overline{HK}$

reflexive Prop
 $\overline{GH} \cong \overline{GH}$

$\Delta KGH \cong \Delta LHG$

C.P.C.T.C.
 $\angle K \cong \angle L$



~~... the ...~~

4. Given: $\angle F$ and $\angle H$ are right angles
 G is the midpoint of \overline{FH}
 $\overline{EG} \cong \overline{LG}$

Prove: $\angle E \cong \angle L$

**HINT: Think about which shortcut applies to right triangles!

