

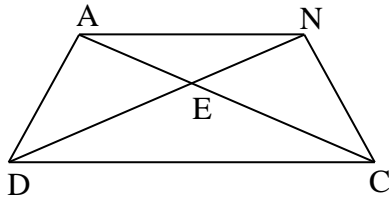
Review for Proof Final Exam

Directions: Please write a two-column proof for each problem on a separate piece of paper.

Part 1: Triangle Proofs

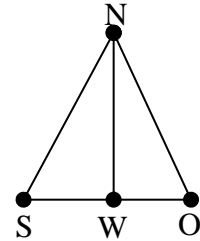
- 1) **Given:** $\overline{AE} \cong \overline{NE}$
 $\overline{DE} \cong \overline{CE}$

Prove: $\triangle AED \cong \triangle NEC$



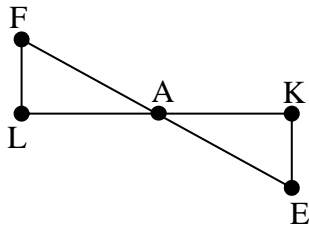
- 2) **Given:** $\angle S \cong \angle O$
 \overline{NW} bisects $\angle SNO$

Prove: $\triangle SNW \cong \triangle ONW$



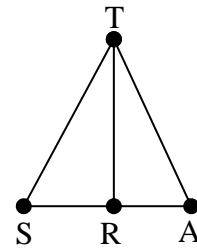
- 3) **Given:** A is midpoint of \overline{LK}
 $\angle L \cong \angle K$

Prove: $\overline{FL} \cong \overline{EK}$



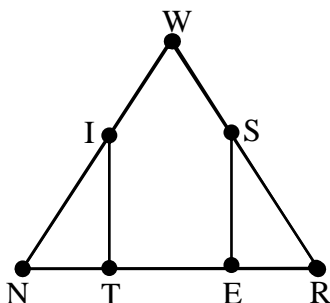
- 4) **Given:** $\overline{TR} \perp \overline{SA}$
 $\overline{ST} \cong \overline{AT}$

Prove: $\overline{SR} \cong \overline{RA}$



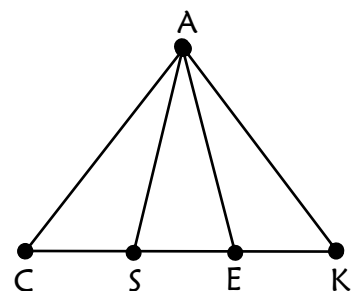
- 5) **Given:** $\overline{WN} \cong \overline{WR}$
 $\overline{NT} \cong \overline{ER}$
 $\overline{IN} \cong \overline{SR}$

Prove: $\overline{IT} \cong \overline{SE}$



- 6) **Given:** $\triangle CAK$ is isosceles
 with base \overline{CK}
 $\overline{CS} \cong \overline{KE}$

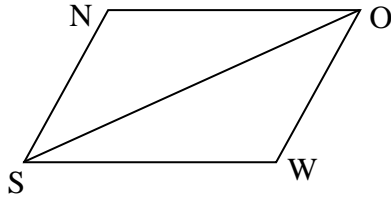
Prove: $\overline{AS} \cong \overline{AE}$



Part 2: Parallelogram Proofs

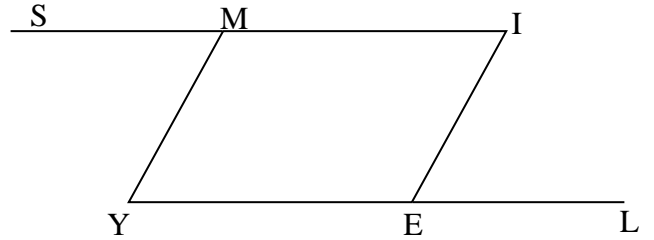
7) Given: $\angle N \cong \angle W$
 $\overline{SN} \parallel \overline{WO}$

Prove: SNOW is a \square



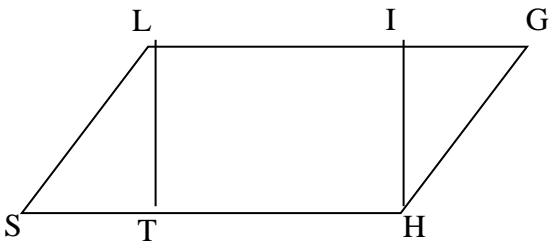
8) Given: $\overline{SI} \parallel \overline{YL}$
 $\angle Y \cong \angle IEL$

Prove: MIEY is a \square



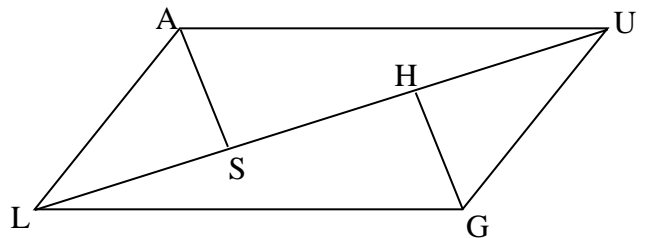
9) Given: LGHS is a \square
 $\angle SLT \cong \angle GHI$

Prove: $\overline{LT} \cong \overline{IH}$



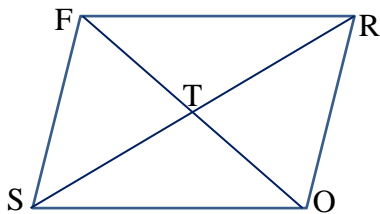
10) Given: LAUG is a \square
 $\overline{LS} \cong \overline{UH}$

Prove: $\overline{AS} \cong \overline{HG}$



11) Given: T is midpoint of \overline{FO}
 $\angle FST \cong \angle ORT$

Prove: FROS is a \square



12) List the 5 ways to prove Δ 's \cong .

What do you use to prove parts are \cong after proving Δ 's \cong ?

What are the 5 ways to prove a quadrilateral is a parallelogram?