

Name Schlansky
Mr. Schlansky

Date _____
Geometry

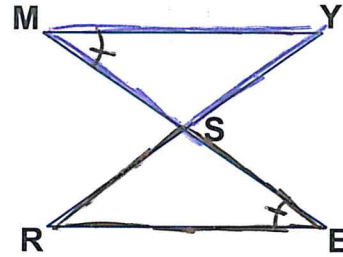


Proving Parallel Mini Proofs

1. Given: $\triangle MYS \cong \triangle ERS$

Prove: $\overline{MY} \parallel \overline{RE}$

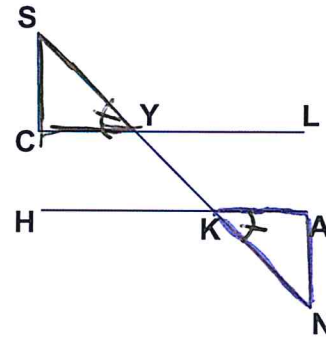
Statements	Reasons
① $\triangle MYS \cong \triangle ERS$	① given given
② $\angle M \cong \angle E$	② CPCTC
③ $\overline{MY} \parallel \overline{RE}$	③ Parallel lines cut by a transversal create congruent alternate interior angles.



2. Given: $\triangle SCY \cong \triangle NAK$

Prove: $\overline{CL} \parallel \overline{HA}$

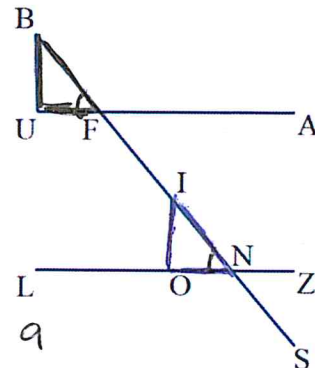
Statements	Reasons
① $\triangle SCY \cong \triangle NAK$	① given
② $\angle SCY \cong \angle AKN$	② CPCTC
③ $\overline{CL} \parallel \overline{HA}$	③ Parallel lines cut by a transversal create congruent alternate exterior angles.



3. Given: $\triangle BUF \cong \triangle ION$

Prove: $\overline{UA} \parallel \overline{LZ}$

Statements	Reasons
① $\triangle BUF \cong \triangle ION$	① given
② $\angle BFU \cong \angle INO$	② CPCTC
③ $\overline{UA} \parallel \overline{LZ}$	③ Parallel lines cut by a transversal creates congruent corresponding angles.



4. Given: $\triangle SRE \cong \triangle ABE$

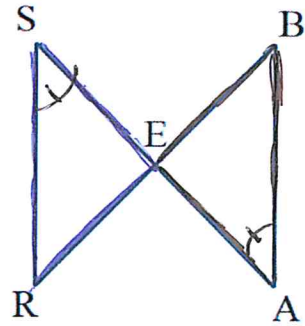
Prove: $\overline{SR} \parallel \overline{BA}$

Statements

- ① $\triangle SRE \cong \triangle ABE$
- ② $\angle S \cong \angle A$
- ③ $\overline{SR} \parallel \overline{BA}$

Reasons

- ① given
- ② CPCTC
- ③ Parallel lines cut by a transversal create congruent alternate interior angles.



5. Given: $\triangle RMS \cong \triangle GOT$

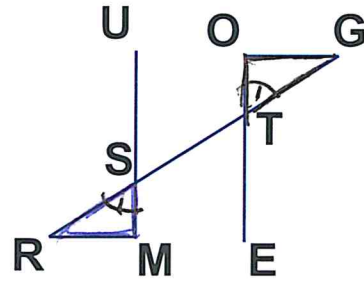
Prove: $\overline{MU} \parallel \overline{EO}$

Statements

- ① $\triangle RMS \cong \triangle GOT$
- ② $\angle RSM \cong \angle GTO$
- ③ $\overline{MU} \parallel \overline{EO}$

Reasons

- ① given
- ② CPCTC
- ③ Parallel lines cut by a transversal create congruent alternate exterior angles



6. Given: $\triangle ABE \cong \triangle RSE$

Prove: $\overline{SR} \parallel \overline{AB}$

Statements

- ① $\triangle ABE \cong \triangle RSE$
- ② $\angle A \cong \angle R$
- ③ $\overline{SR} \parallel \overline{AB}$

Reasons

- ① given
- ② CPCTC
- ③ Parallel lines cut by a transversal create congruent alternate interior angles.

