

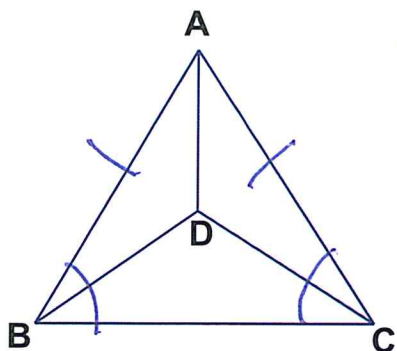
Name Schlansky
Mr. Schlansky

Date _____
Geometry



Isosceles Triangle Theorem Mini Proofs

1. Given: $\angle ABC \cong \angle ACB$
Prove: $\triangle ADB \cong \triangle ADC$



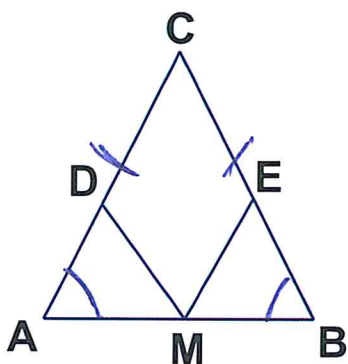
Statements

① $\angle ABC \cong \angle ACB$
② $\overline{AB} \cong \overline{AC}$

Reasons

① given
② Isosceles Triangle Theorem

2. Given: $\overline{CA} \cong \overline{CB}$
Prove: $\triangle ADM \cong \triangle BEM$



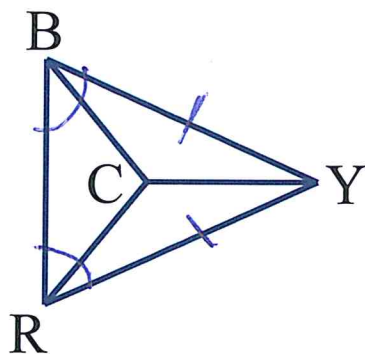
Statements

① $\overline{CA} \cong \overline{CB}$
② $\angle CAB \cong \angle CBA$

Reasons

① given
① Isosceles Triangle Theorem

3. Given: $\angle BRY \cong \angle YRB$
Prove: $\triangle YCB \cong \triangle YCR$



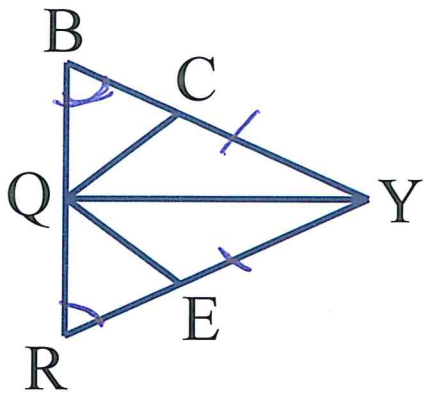
Statements

① $\angle BRY \cong \angle YRB$
② $\overline{BC} \cong \overline{CR}$

Reasons

① given
② Isosceles Triangle Theorem

4. Given: $\overline{BY} \cong \overline{RY}$
 Prove: $\Delta BQC \cong \Delta RQE$



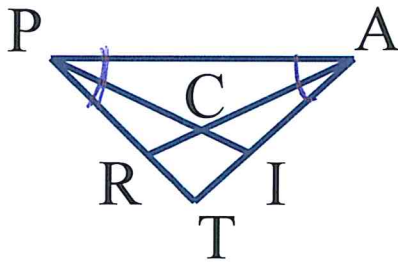
statements

- ① $\overline{BY} \cong \overline{RY}$
- ② $\angle CBQ \cong \angle YRQ$

Reasons

- ① given
- ② Isosceles Triangle Theorem

5. Given: $\overline{PT} \cong \overline{AT}$
 Prove: $\Delta PRA \cong \Delta AIP$



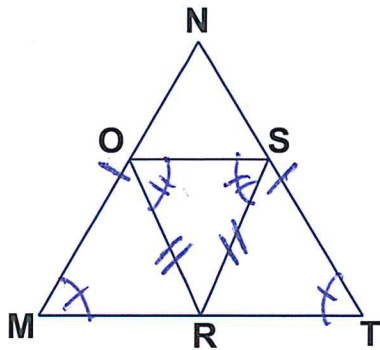
statements

- ① $\overline{PT} \cong \overline{AT}$
- ② $\angle TPA \cong \angle TAP$

Reasons

- ① given
- ② Isosceles Triangle Theorem

6. Given: $\overline{MN} \cong \overline{NT}$, $\angle ROS \cong \angle RSO$
 Prove: $\Delta MOR \cong \Delta TSR$



statements

- ① $\overline{MN} \cong \overline{NT}$
- ② $\angle OMR \cong \angle STR$
- ③ $\angle ROS \cong \angle RSO$
- ④ $\overline{OR} \cong \overline{SR}$

Reasons

- ① given
- ② Isosceles Triangle Theorem
- ③ given
- ④ Isosceles Triangle Theorem