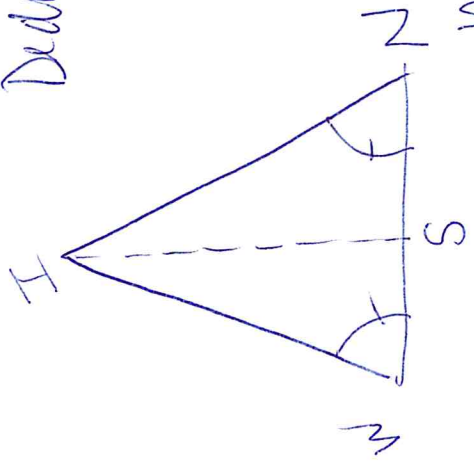


Deductive Proof of C-19 - Converse of Isosceles Δ Th.



Given: $\triangle WIN$ with angle bisector \overline{IS}

$$\angle W \cong \angle N$$

Show: $\overline{WI} \cong \overline{NI}$

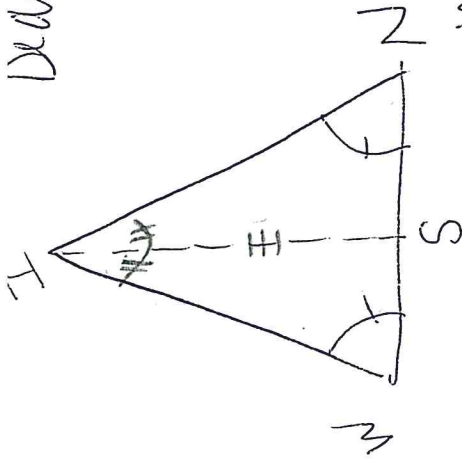
What	Why
① ?	Given
② $\angle W \cong \angle N$?
③ ?	Shared Side
④ $\angle WIS \cong \angle NIS$?
⑤ $\triangle WIS \cong \triangle NIS$?
⑥	Corresponding parts are congruent

Which shortcut

\therefore If two angles of a triangle are congruent, then the triangle is isosceles. (C-19) now a Theorem!

Converse of Isos Δ Theorem.

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What

① ? $\triangle WIN$ with angle bisector \overline{IS}

② $\angle W \cong \angle N$

③ ? $\overline{IS} \cong \overline{IS}$

④ $\angle WIS \cong \angle NIS$

⑤ $\triangle WIS \cong \triangle NIS$

⑥ $\overline{WI} \cong \overline{NI}$

Why

Given

? Given

Shared Side

? def of angle bisector

? ~~SAA~~ SAA shortcut which shortcut

Corresponding parts are congruent

\therefore If two angles of a triangle are congruent, then the triangle is isosceles. (C-19) now a Theorem!
Converse of Isos Δ Theorem.