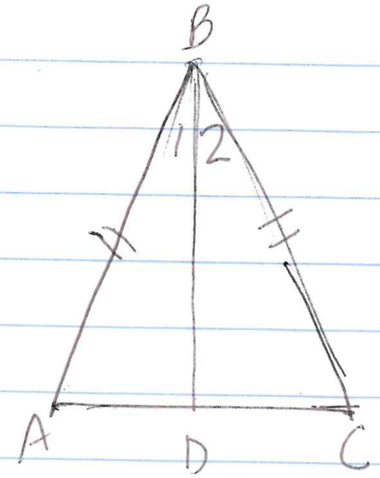

Given: isosceles $\triangle ABC$ with $\overline{AB} \cong \overline{CB}$ and angle bisector $\overline{BD}$

Show: $\angle A \cong \angle C$

What I know	Why I know
$\overline{AB} \cong \overline{CB}$	? Given
$\overline{BD}$ is an angle bisector	?
? $\overline{BD} \cong \overline{BD}$	shared side
$\angle 1 \cong \angle 2$	def of angle bisector
$\triangle ABD \cong \triangle CBD$	? SAS Th.
? $\angle A \cong \angle C$	def of congruent polygons

∴ The base angles of an isosceles triangle are congruent.

HW #4 pp 227-8: 1-15 write $\triangle$ ___ $\cong \triangle$ ___ by ___

also p 218: 19-20

also write up C-26-27 on pp 225-6

Save CBD