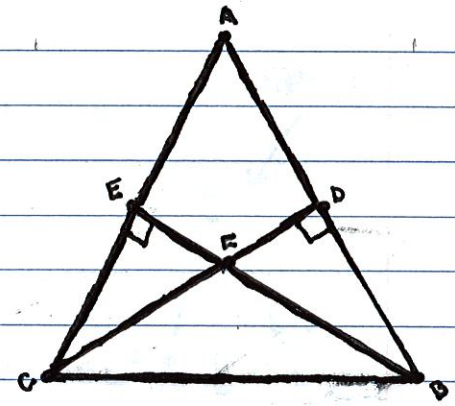
Tayler Yoder Period: 9 1/26/20

#27: If segments are drawn from the endpoints of the base of an isosceles triangle perpendicular to the opposite legs, then those segments are congruent.

$\triangle ABC$ is an isosceles $\triangle$	Given
$\overline{CD} \perp \overline{AB}$; $\overline{EB} \perp \overline{AC}$	Given
$\overline{CB} \cong \overline{CB}$	Reflexive
$\overline{AB} \cong \overline{AC}$	Def. of isosceles $\triangle$
$m\angle FEC = 90°$ $m\angle FDB = 90°$	Def. of $\perp$
$m\angle FEC = m\angle FDB$	Substitution
$m\angle FEC \cong m\angle FDB$	Def. of $\cong$
$\angle ACB \cong \angle ABC$	Base $\angle$'s thrm
$\triangle ECB \cong \triangle DBC$	AAS $\cong$
$\overline{CD} \cong \overline{EB}$	CPCTC



Given: $\triangle ABC$ is an isosceles $\triangle$; $\overline{CD} \perp \overline{AB}$; $\overline{EB} \cong \overline{AC}$

Prove: $\overline{CD} \cong \overline{EB}$