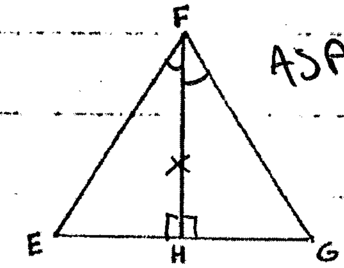
Name______________________________

GIVEN: $\overline{HF}$ BISECTS $\angle EFG$
$\overline{HF} \perp \overline{EG}$

PROVE: $\triangle EHF \cong \triangle GHF$



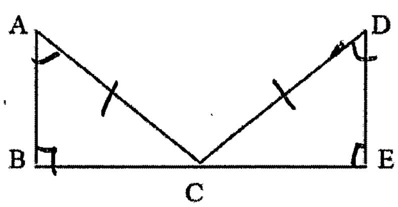
ASA

	S	R
A	1. $\overline{HF}$ bisects $\angle EFG$	1. Given
	2. $\angle EFH = \angle HFG$	2. def of line bisector
S	3. $\overline{FH} = \overline{FH}$	3. Reflexive
A	4. $HF \perp EG$	4. Given
	5. $\angle EHF$ and $\angle GHF$ are right angls	5. def of $\perp$ lines
	6. $\angle EHF = \angle GHF$	6. def of Right angls
	7. $\triangle EHF = \triangle GHF$	7. ASA

Given: $\overline{AB} \perp \overline{BE}$, $\overline{DE} \perp \overline{BE}$, $\overline{AC} \cong \overline{DC}$, and <BAC ≅ <EDC

Prove: ΔABC ≅ ΔDEC

AAS

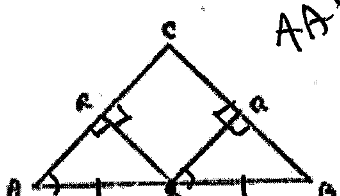


	S	R
A.	1. $\angle BAC \cong \angle EDC$	1. Given
A.	2. $AB \perp DE$ and $DE \perp BE$	2. Given
	3. $\angle B$ and $\angle E$ are right angls	3. def of $\perp$ lines
	4. $\angle B \cong \angle E$	4. def of right angles
S	5. $\overline{AC} \cong DC$	5. Given
	6. $\triangle ABC = \triangle PEC$	6. AAS

GIVEN: $\overline{PR} \perp \overline{CA}$
$\overline{BQ} \perp \overline{QP}$
P is the midpt. to $\overline{AB}$
$\angle RAP \cong \angle QPB$

PROVE: $\triangle ARP \cong \triangle PQB$

AAS



	S	R
A	1. $PR \perp CA$ and $BQ \perp QP$	1. given
	2. $\angle BQP$ and $\angle PRA$ are right angls	2. def of $\perp$ lines
	3. $\angle BQP \cong \angle PRA$	3. def of riht angls
A	4. $\angle RAP \cong \angle QPC$	4. Given
S	5. P is the midpoint of $\overline{AB}$	5. Given
	6. $\overline{AP} = \overline{PB}$	6. def of midpoint
	7. $\triangle ARP \cong \triangle PQB$	7. AAS