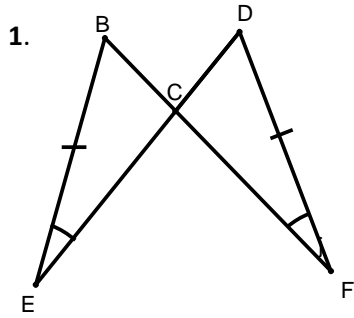


Unit 8 Day 3 – Proving Triangles Congruent Assignment

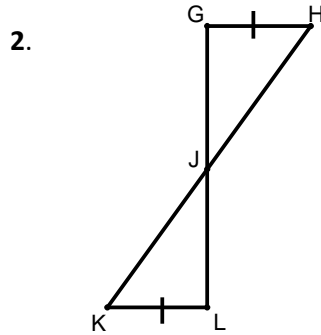
- For each problem: 1. Mark any vertical angles on the diagram. Also mark any sides of triangles that are common.
 2. Mark any given information on the diagram.
 3. Based on the markings, determine if the triangles are congruent.
 4. If they are, give the three letter combination (SSS, SAS, ASA, AAS) which FORCES triangle congruence.
 If they not congruent, explain why not.
 5. Complete the triangle congruence statement by writing corresponding parts in the correct order.



Congruent: yes or no

Reason:

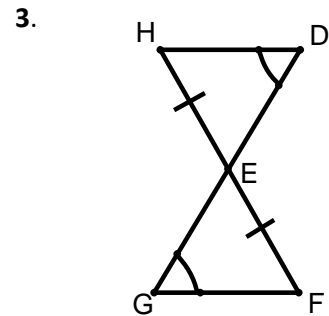
$\triangle BCE \cong \triangle$ _____



Congruent: yes or no

Reason:

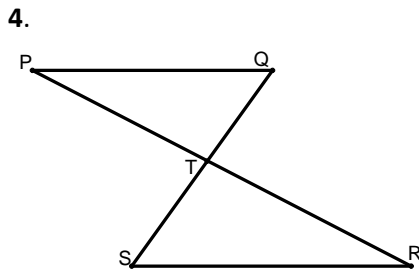
$\triangle GHJ \cong \triangle$ _____



Congruent: yes or no

Reason:

$\triangle EFG \cong \triangle$ _____

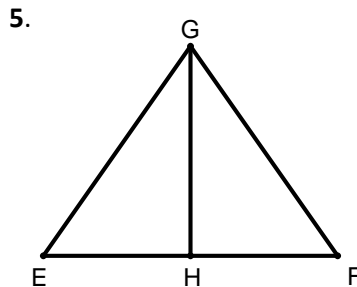


Given: SQ and PR bisect each other

Congruent: yes or no

Reason:

$\triangle RST \cong \triangle$ _____

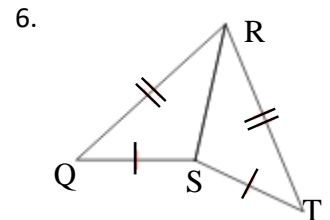


Given: \overline{GH} bisects $\angle EGF$, $\overline{EG} \cong \overline{FG}$

Congruent: yes or no

Reason:

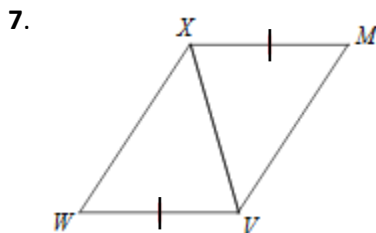
$\triangle EGH \cong \triangle$ _____



Congruent: yes or no

Reason:

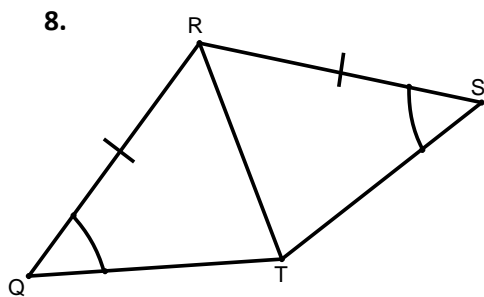
$\triangle RST \cong \triangle$ _____



Congruent: yes or no

Reason:

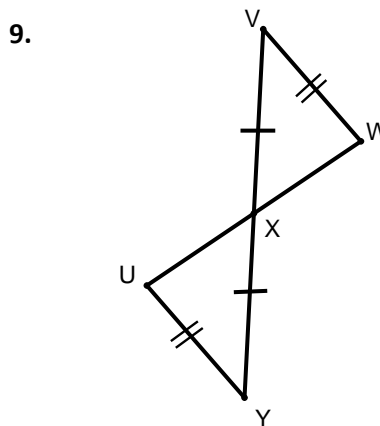
$\triangle WXV \cong \triangle$ _____



Congruent: yes or no

Reason:

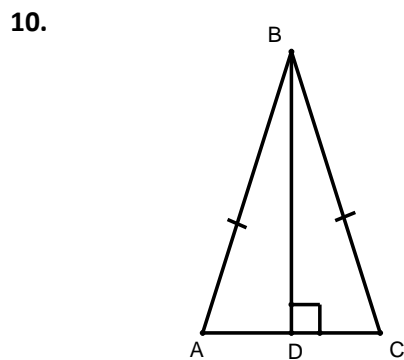
$\triangle STR \cong \triangle$ _____



Congruent: yes or no

Reason:

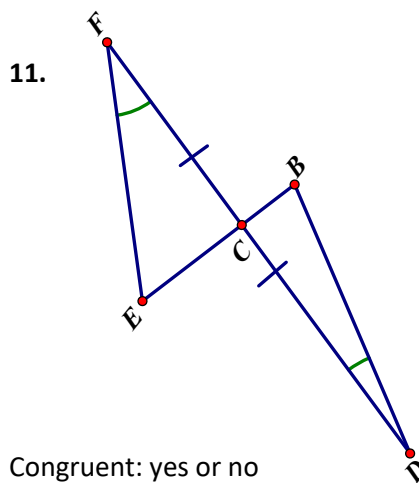
$\triangle WXV \cong \triangle$ _____



Congruent: yes or no

Reason:

$\triangle BAD \cong \triangle$ _____



Congruent: yes or no

Reason:

$\triangle BDC \cong \triangle$ _____

12. **Given:** \overline{XZ} bisects $\angle YZW$ and $\overline{YZ} \cong \overline{WZ}$.

Congruent: yes or no

Reason: _____

$\triangle XYZ \cong \triangle$ _____

