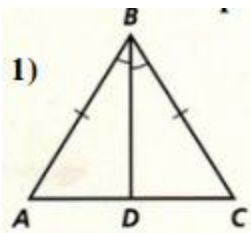


Congruent Triangles Worksheet

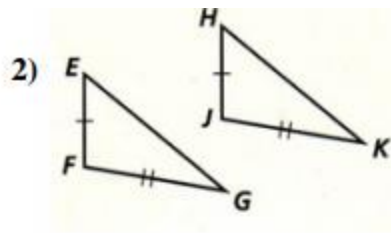
Name: _____ Hr: _____

- A) Determine whether the following triangles are congruent.
- B) If they are, name the triangle congruence (Pay attention to proper correspondence when naming the triangles) and then identify the theorem or postulate (SSS, SAS, ASA, AAS, HL) that supports your conclusion.
- C) Be sure to show any additional congruence markings you used in your reasoning.
- D) If the triangles cannot be proven congruent, state "not possible." Then give the reason it is not possible.



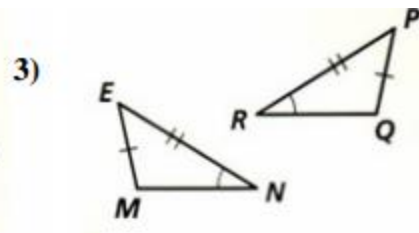
Congruence:
 $\triangle ABD \cong \triangle$ _____

Reason:



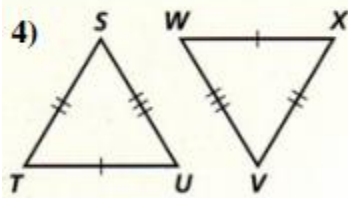
Congruence:
 $\triangle EFG \cong \triangle$ _____

Reason:



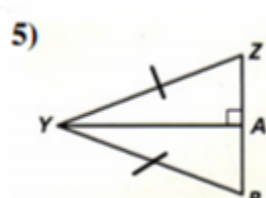
Congruence:
 $\triangle EMN \cong \triangle$ _____

Reason:



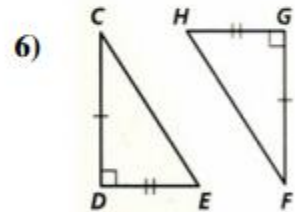
Congruence:
 $\triangle STU \cong \triangle$ _____

Reason:



Congruence:
 $\triangle YZA \cong \triangle$ _____

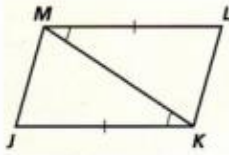
Reason:



Congruence:
 $\triangle CDE \cong \triangle$ _____

Reason:

7)

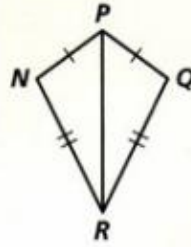


Congruence:

$\triangle KJM \cong \triangle$ _____

Reason:

8)

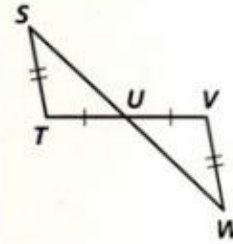


Congruence:

$\triangle NPR \cong \triangle$ _____

Reason:

9)

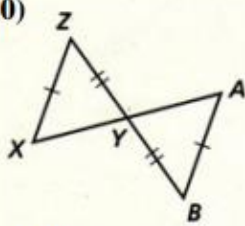


Congruence:

$\triangle STU \cong \triangle$ _____

Reason:

10)

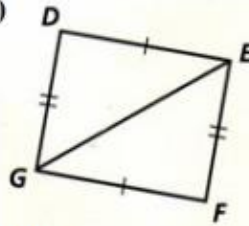


Congruence:

$\triangle XYZ \cong \triangle$ _____

Reason:

11)

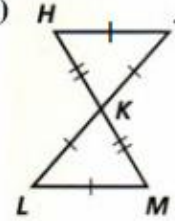


Congruence:

$\triangle DEG \cong \triangle$ _____

Reason:

12)

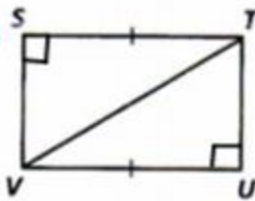


Congruence:

$\triangle HJK \cong \triangle$ _____

Reason:

13)

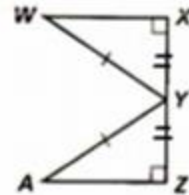


Congruence:

$\triangle STV \cong \triangle$ _____

Reason:

14)

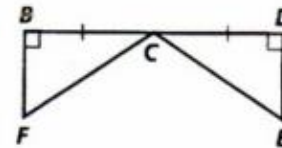


Congruence:

$\triangle WXY \cong \triangle$ _____

Reason:

15)

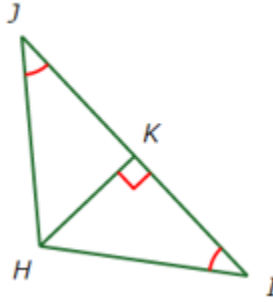


Congruence:

$\triangle BCF \cong \triangle$ _____

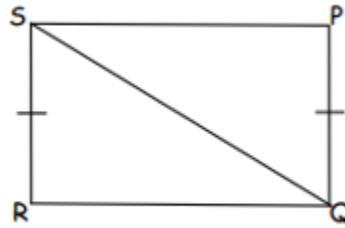
Reason:

16. Given: $\angle I \cong \angle J$
 $\overline{HK} \perp \overline{IJ}$
 Prove: $\overline{JK} \cong \overline{IK}$



Statement	Reason
1. $\angle I \cong \angle J$	1.
2. $\overline{HK} \perp \overline{IJ}$	2.
3. $\angle HKI$ and $\angle HKJ$ are right angles	3.
4. $\angle HKI \cong \angle HKJ$	4.
5. $\overline{HK} \cong \overline{HK}$	5.
6. $\triangle HKI \cong \triangle HKJ$	6.
7. $\overline{JK} \cong \overline{IK}$	7.

17. Given: $\overline{RS} \cong \overline{PQ}$
 $\angle P$ and $\angle R$ are right angles
 Prove: $\triangle PQS \cong \triangle RSQ$



Statement	Reason
1. $\overline{RS} \cong \overline{PQ}$	1.
2. $\angle P$ and $\angle R$ are right angles	2.
3. $\triangle PQS$ and $\triangle RSQ$ are right triangles	3.
4. $\overline{SQ} \cong \overline{SQ}$	4.
5. $\triangle PQS \cong \triangle RSQ$	5.