Notesheet: Right Triangles and Congruence

Draw a right triangle.

bel the right angle.

The legs of a right triangle are _____

The hypotenuse of a right triangle is _____

Hypotenuse-Leg (HL) Theorem

If the hypotenuse and leg of one right triangle are congruent to the hypotenuse and leg of

another right triangle, then _____.
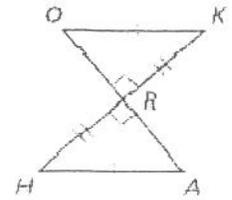
Can HL be used to prove the triangles congruent? If so, write the triangle congruence statement.
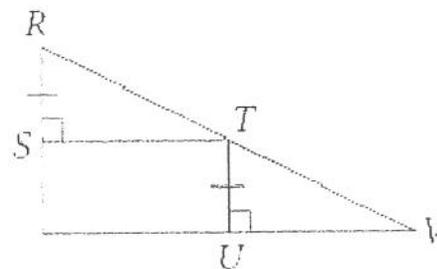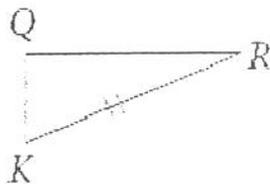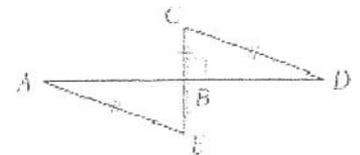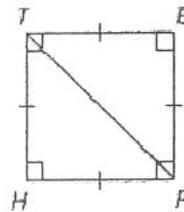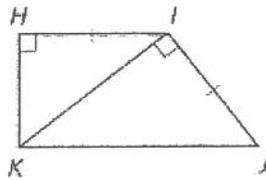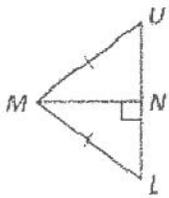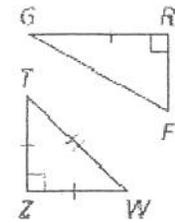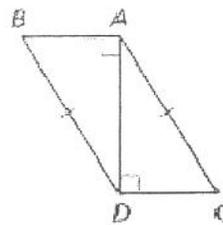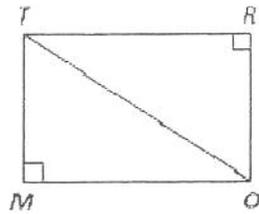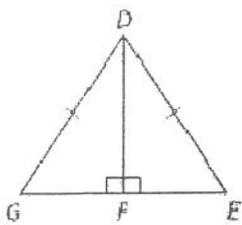

T is the midpoint of $\overline{RV}$.

ame _____

Congruent Triangles— AAS, HL

— Remember

Angle-Angle-Side (AAS) Congruence—If two angles and a non-included side of one triangle are congruent to two angles and a non-included side of another triangle, then the two triangles are congruent.
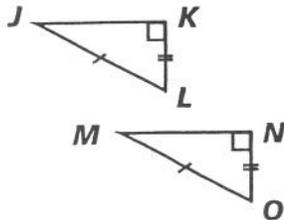
Hypotenuse-Leg (HL) Congruence—If the hypotenuse and a leg of one right triangle are congruent to the hypotenuse and a leg of another right triangle, then the two triangles are congruent.

In a right triangle, the sides that form the right angle are *legs*. The side opposite the right angle is the *hypotenuse*.

Determine which methods if any can prove the triangles are congruent. There may be more than one answer. Shade in the matching column letters. Copy the letters onto the blanks to reveal the riddle answer.

1.

2.

3.

4.

5.

6.

7.
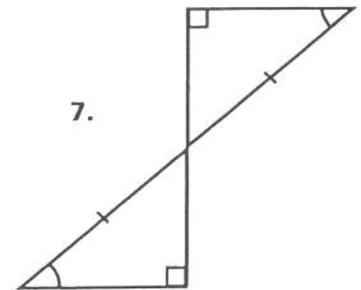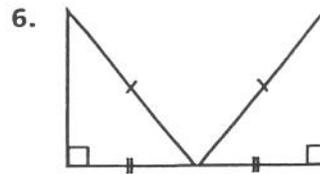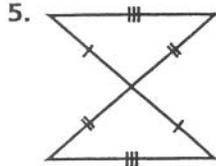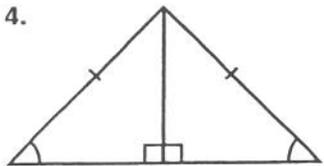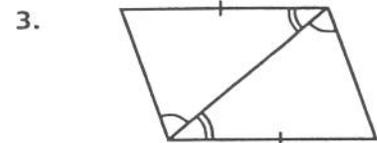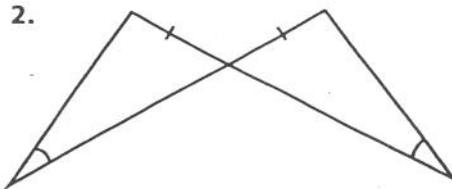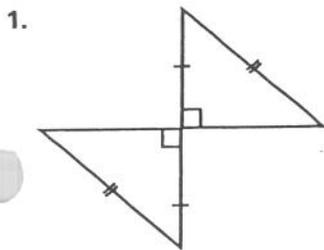
	SSS	SAS	ASA	AAS	HL	can't
1.	U	M	W	A	N	P
2.	B	R	I	O	L	Y
3.	A	N	E	C	Q	T
4.	M	E	P	A	N	R
5.	T	P	H	E	G	F
6.	Z	A	D	H	R	E
7.	I	M	O	V	G	U
8.	S	N	A	K	L	E
9.	W	I	T	B	E	X

8.

9.
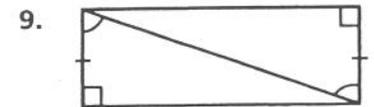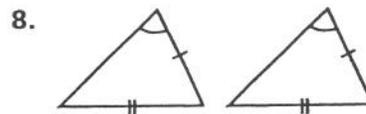
How many geometry teachers does it take to change a light bulb?

_ _ _ _ _ _ . THEY _ _ _ _ ' _ DO IT.

THEY CAN ONLY _ _ _ _ _ _ _

_ _ _ CAN _ _ _ DONE!