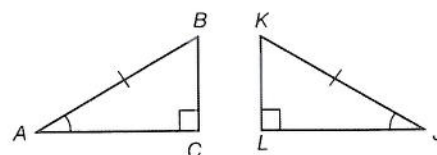


**Hypotenuse-Angle Congruence Theorem:** If the hypotenuse and an acute angle of one right triangle are congruent to the hypotenuse and an acute angle of another right triangle, then the triangles are congruent.

Use the Hypotenuse-Angle Congruence Theorem to prove that  $\triangle ABC \cong \triangle JKL$ .

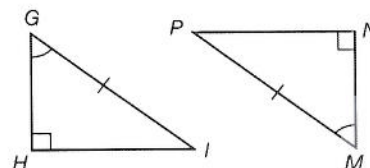
Statement	Reason
1. $\triangle ABC$ and $\triangle JKL$ are right triangles.	1. Given
2. $\angle A \cong \angle J$	2. Given
3. $\overline{AB} \cong \overline{JK}$	3. Given
4. $\triangle ABC \cong \triangle JKL$	4. HA Congruence Theorem



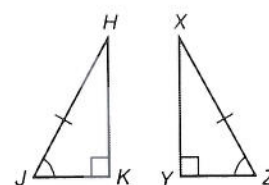
**Practice**

1. Use the Hypotenuse-Angle Congruence Theorem to show that  $\triangle GHI \cong \triangle MNP$ .

Statement	Reason
1. $\triangle GHI$ and $\triangle MNP$ are right triangles.	1. _____
2. _____	2. Given
3. _____	3. Given
4. $\triangle GHI \cong \triangle MNP$	4. _____



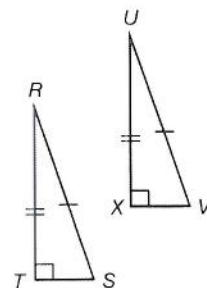
2. Use the Hypotenuse-Angle Congruence Theorem to prove that  $\triangle HJK \cong \triangle XYZ$ .

**Hypotenuse-Leg Congruence Theorem:** If the hypotenuse and a leg of one right triangle are congruent to the hypotenuse and a leg of another right triangle, then the triangles are congruent.

Use the Hypotenuse-Leg Congruence Theorem to prove that  $\triangle RST \cong \triangle UVX$ .

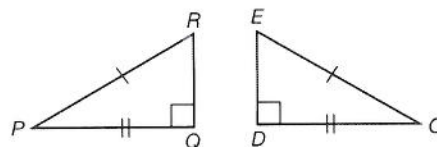
$\triangle RST$  and  $\triangle UVX$  are both given as right triangles. Leg  $\overline{RT}$  is congruent to leg  $\overline{UX}$  as given. Also, hypotenuse  $\overline{RS}$  is congruent to hypotenuse  $\overline{UV}$  as given. Therefore,  $\triangle RST \cong \triangle UVX$  are congruent by the HL Congruence Theorem.



**Practice**

3. Use the Hypotenuse-Leg Congruence Theorem to prove that  $\triangle PQR \cong \triangle CDE$ .

Statement	Reason
1. $\triangle PQR$ and $\triangle CDE$ are right triangles.	1. _____
2. _____ _____	2. Given
3. $\triangle GHI \cong \triangle MNP$	4. _____



4. Use the Hypotenuse-Leg Congruence Theorem to prove that  $\triangle ABC \cong \triangle VWX$ .

5. Use the Hypotenuse-Leg Congruence Theorem to prove that  $\triangle EFG \cong \triangle MNP$ .