

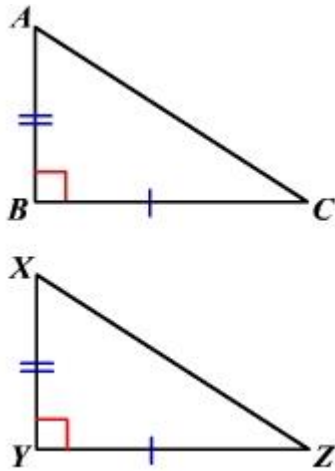
Answer on Question #43054 – Math – Geometry

Task: please tell me and show examples of congruence in right triangles

Answer:

- **Leg-Leg Congruence**

If the legs of a right triangle are congruent to the corresponding legs of another right triangle, then the triangles are congruent.

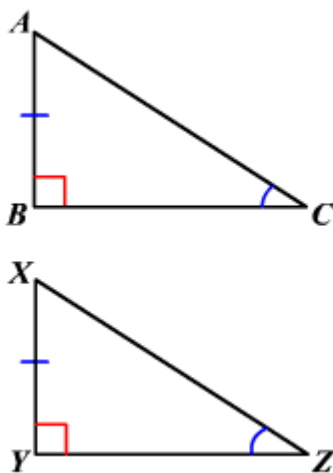


In the figure, $\overline{AB} \cong \overline{XY}$ and $\overline{BC} \cong \overline{YZ}$.

So, $\triangle ABC \cong \triangle XYZ$

- **Leg-Angle Congruence**

If one leg and an acute angle of a right triangle are congruent to one leg and the corresponding acute angle of another right triangle, then the triangles are congruent.

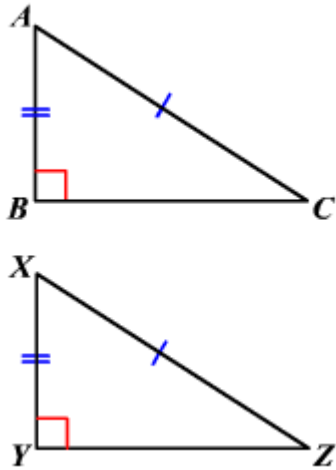


In the figure, $\overline{AB} \cong \overline{XY}$ and $\angle C \cong \angle Z$.

So, $\triangle ABC \cong \triangle XYZ$.

- **Hypotenuse-Leg Congruence**

If the hypotenuse and a leg of a right triangle are congruent to the hypotenuse and corresponding leg of another right triangle, then the triangles are congruent.



In the figure, $\overline{AB} \cong \overline{XY}$ and $\overline{AC} \cong \overline{XZ}$.

So, $\triangle ABC \cong \triangle XYZ$.