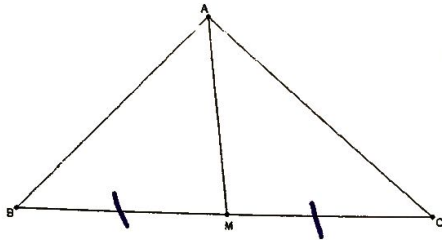


Unit 2 Congruence and Proof

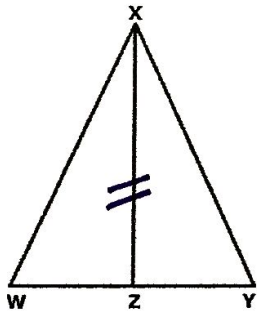
Based on the definition of the given words, what do you know about the diagram?

6. Given \overline{AM} is a median of $\triangle ABC$, I know: M is the midpoint

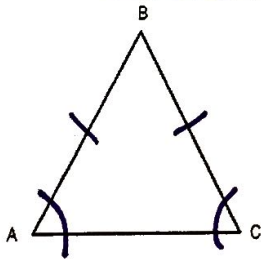


$$\overline{BM} \cong \overline{MC}$$

7. Given the following diagram, I know $\overline{XZ} \cong \overline{XZ}$ because of Reflexive property.



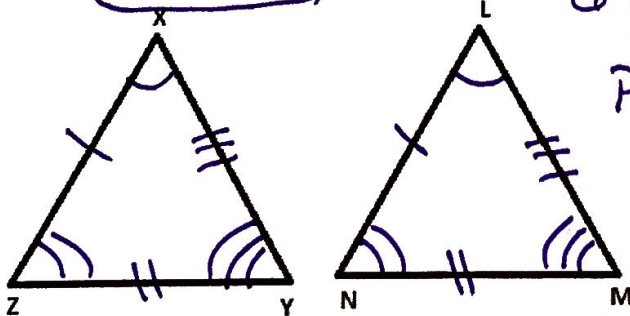
8. Given isosceles triangle ABC with legs \overline{AB} and \overline{BC} , and base \overline{AC} . Since isosceles triangles have reflectional symmetry, I know the legs are congruent and I know:



\Rightarrow fold triangle, so both sides match

$\angle A \cong \angle C$ because of reflectional symmetry

9. Given $\triangle ZXY \cong \triangle NLM$, I know:



6 pairs of corresponding parts are congruent.

$$\begin{aligned} \angle X &\cong \angle L & \overline{XZ} &\cong \overline{LN} \\ \angle Z &\cong \angle N & \overline{ZY} &\cong \overline{NM} \\ \angle Y &\cong \angle M & \overline{XY} &\cong \overline{LM} \end{aligned}$$