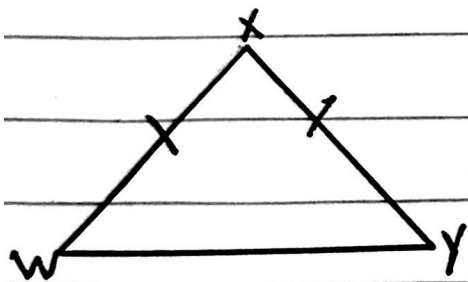


Converse of the Perpendicular Bisector Theorem

states that if a point is equidistant from the endpoints of a segment, then it is on the perpendicular bisector of the segment.



for example the diagram below shows that $\overline{WX} \cong \overline{XY}$, meaning that point X is equidistant from the endpoints of $\overline{WY}$.

