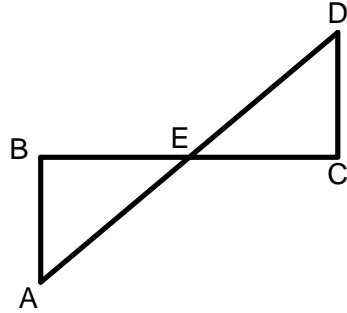


Given: AD bisects BC at E.

$AB \perp BC$

$DC \perp BC$

Prove: $AB \cong DC$



There are two triangles $\triangle ABE$ and $\triangle DEC$ in which $BE=EC$ (given), $\angle ABE=\angle ECD=90^\circ$ (given) and $\angle BEA=\angle DEC$ (vertically opposite angles), so $\triangle ABE$ and $\triangle DEC$ are congruent, so $AB=DC$ (as the matching sides)