5. *Prove that the mid-point of the*
is equidistant from its vertices.

Solution Here, $\angle CAB = 90°$, let D be the mid-poi

$$\mathbf{BD = DC}$$

$$\mathbf{AB = AD + DB}$$

$$\mathbf{AC = AD + DC = AD + BD}$$

Since, $\angle BAC = 90°$ $\mathbf{AB \perp AC}$

$$\mathbf{(AD + DB) \cdot (AD + BI}$$

$$\mathbf{(AD - BD) \cdot (AD + BI}$$

$$AD^2 - BL$$

$\therefore$ $AD = BD$ also Bi

$\because$ D is mid-point of BC

Thus, $|AD| = |BD| = |DC|$. Hence, the result.