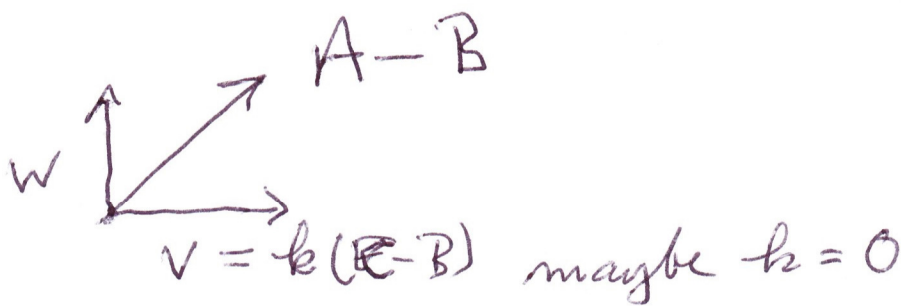
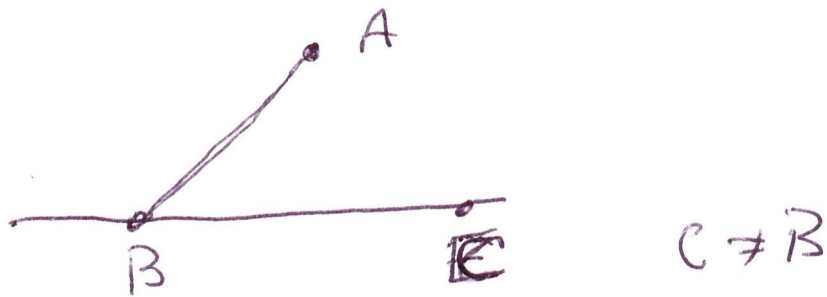


Prop III. 1.4



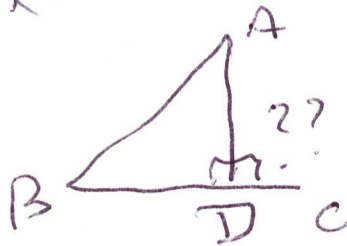
resolve into \perp components.

$$v = \frac{\langle A-B, C-B \rangle}{|C-B|^2} \cdot (C-B) \text{ more precisely.}$$

[Check $(A-B)$ minus this vector is $\perp (C-B)$

Note $w \neq 0$, for otherwise $A \in BC$.

$$\text{Then } D \equiv A = (A-B) - w = x.$$



To prove $AD \perp CD$

If $E \in BC$ & $AE \perp BC$, then $E \equiv D$.