$\Rightarrow DL \parallel AC$ & $AC = \ldots$

therefore $ADCL$ is a parallelogram.

Given $AB \parallel CK$ & $AB = CK$

$\Rightarrow A\hat{B}C = B\hat{C}K$

from 2 △ ABC & BCK

$$\begin{cases} AB = CK \\ A\hat{B}C = B\hat{C}K \\ BC \text{ (common side)} \end{cases}$$

$\Rightarrow$ 2 △ are $\cong$s

$\Rightarrow AC \parallel BK$ & $AC = BK$

$\therefore ABKC$ is a parallelogram.

b) 2 △ ABD & CKL

$$\begin{cases} AD = CL \ \& \ AD \parallel CL \\ AB = CK \ \& \ AB \parallel CK \end{cases}$$

$\Rightarrow BD = KL$ & $BD \parallel KL$

$\therefore D\hat{A}B = L\hat{C}K$

On the sides AB & AC of a triangle ABC construct an exterior squares $ABDE$ and $ACFG$. The joint peachs E and G, as well the points D & C, B & F. lower

a) Show that the $\perp$ of A at EG is the middle of the triangle ABC.

... from B & C ~~the~~ to the

b) show that the ~~⊥~~ leading from B & C
lines DC & BF intersect on the height AH
of △ ABC

c)