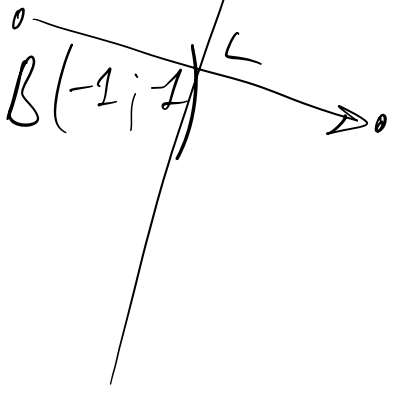
$A(2;-2)$ $h_A \perp \vec{BC}$ por A



$$\vec{BC} = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$$

$C(3;2)$

$h_A : 4x + 3y + c = 0$

h_A passe por $(2;-2) \Rightarrow 4 \cdot 2 + 3 \cdot (-2) + c = 0$

$8 - 6 + c = 0 \;/\; c = -2$

$\Rightarrow \boxed{h_A : 4x + 3y - 2 = 0}$

$h_B \perp \vec{AC}$ por B / $\vec{AC} = \begin{pmatrix} 1 \\ 4 \end{pmatrix}$

$h_B : x + 4y + c = 0$ por $(-1;-1)$ / $-1 - 4 + c = 0$

$c = 5$

$\boxed{h_B : x + 4y + 5 = 0}$

$h_C \perp \overrightarrow{AB}$ por C / $\overrightarrow{AB} = \begin{pmatrix} -3 \\ 1 \end{pmatrix}$

$h_C : -3x + y + c = 0$ por $(3;2)$ / $-9 + 2 + c = 0$

$c = 7$

$$\boxed{h_C : -3x + y + 7 = 0}$$