Pauta Desafío nº 2

P14| largo 150 cm y ancho 100 cm
$A = (100, 50)$ $B = (40, 30)$

a) $O = (0, 0)$
$O' = (300, 0)$
$O'' = (300, 200)$

$B' = (260, 30)$
$B'' = (260, 170)$

b) Ec Cartesiana entre A y B''
$A = (100, 50)$
$B'' = (260, 170)$ $\quad m = \frac{120}{160} = \frac{3}{4}$

$y = \frac{3}{4}x + n$

$50 = 75 + n$
$-25 + n$

$y = \frac{3}{4}x - 25 \quad / \cdot 4$

$-3x + 4y + 100 = 0$

c) $G = R = (150, y)$

$y = 150 \cdot \frac{3}{4} - 25$

$y = 87{,}5$

d) $\vec{AB''} \nparallel \vec{AO'}$

$\vec{AO'} = \vec{O''} - \vec{A}$
$= \begin{pmatrix} 300 \\ 200 \end{pmatrix} - \begin{pmatrix} 100 \\ 50 \end{pmatrix}$
$= \begin{pmatrix} 200 \\ 150 \end{pmatrix}$

$\vec{AB''} = \vec{B''} - \vec{A}$
$= \begin{pmatrix} 260 \\ 170 \end{pmatrix} - \begin{pmatrix} 100 \\ 50 \end{pmatrix}$
$= \begin{pmatrix} 160 \\ 120 \end{pmatrix}$

$\vec{AB''} \nparallel \vec{AO'}$
$\begin{pmatrix} 160 \\ 120 \end{pmatrix} \nparallel \begin{pmatrix} 200 \\ 150 \end{pmatrix} \Rightarrow 160 \cdot 150 - 200 \cdot 120 = 0$ //