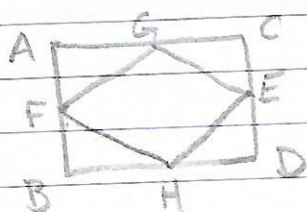


Prova 4 GAN.

1)



$$E = \frac{1}{2}(C+D)$$

$$F = \frac{1}{2}(A+B)$$

$$G = \frac{1}{2}(A+C)$$

$$H = \frac{1}{2}(B+D)$$

para ser um paralelogramo:

$$\vec{EG} = \vec{HF}$$

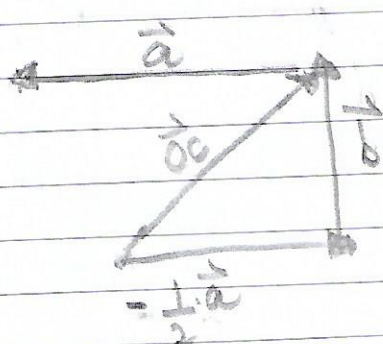
$$G - E = H - F$$

$$\frac{1}{2}(A+C) - \frac{1}{2}(C+D) = \frac{1}{2}(A+B) - \frac{1}{2}(B+D)$$

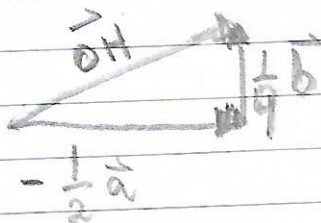
$$A - D = A - D$$

\therefore FGHE é um paralelogramo.

2)



$$\vec{OC} = \vec{b} - \frac{1}{2}\vec{a}$$



$$\vec{OH} = \frac{1}{4}\vec{b} - \frac{1}{2}\vec{a}$$