MX SP **2 Band** **1**

The diagram shows a grid of equally spaced lines.

The vector $\overrightarrow{OH} = \underset{\sim}{h}$ and the vector $\overrightarrow{OA} = \underset{\sim}{a}$.

The point P is halfway between B and C.

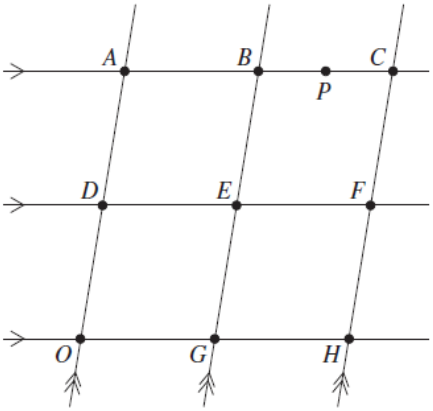
Which expression represents the vector $\overrightarrow{OP}$?

A. $-\frac{1}{2}\underset{\sim}{a} - \frac{1}{4}\underset{\sim}{h}$

B. $\frac{1}{4}\underset{\sim}{a} - \frac{1}{2}\underset{\sim}{h}$

C. $\underset{\sim}{a} + \frac{1}{4}\underset{\sim}{h}$

D. $\underset{\sim}{a} + \frac{3}{4}\underset{\sim}{h}$

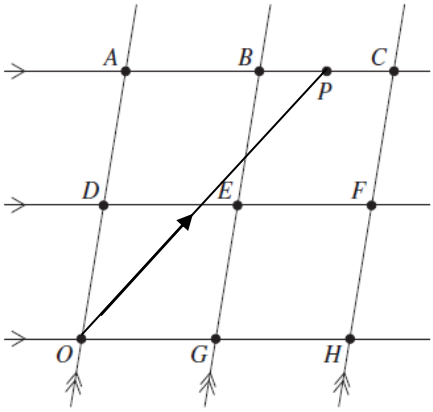


D

$\overrightarrow{OA} = \underset{\sim}{a}$.

As $\overrightarrow{OH} = \underset{\sim}{h}$, then $\overrightarrow{OP} = \frac{3}{4}\underset{\sim}{h}$.

$\therefore \overrightarrow{OP} = \underset{\sim}{a} + \frac{3}{4}\underset{\sim}{h}$



* These solutions have been provided by *projectmaths* and are not supplied or endorsed by NESA.