

A uniform lamina  $OABC$  is a trapezium whose vertices can be represented by coordinates in the  $x$ - $y$  plane. The coordinates of the vertices are  $O(0, 0)$ ,  $A(15, 0)$ ,  $B(9, 4)$  and  $C(3, 4)$ .

Find the  $x$ -coordinate of the centre of mass of the lamina.

[4]