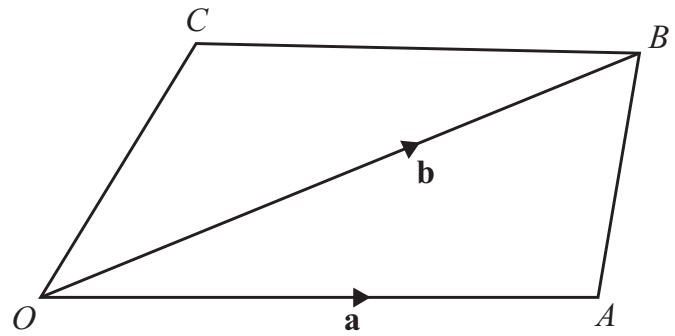
18



NOT TO SCALE

In the diagram, OA is parallel to CB.
$OA : CB = 4 : 3$
$\overrightarrow{OA} = \mathbf{a}$ and $\overrightarrow{OB} = \mathbf{b}$.

(a) Find $\overrightarrow{AB}$ in terms of **a** and **b**.

$\overrightarrow{AB} =$ ..... [1]

(b) M is the midpoint of OC.

Find $\overrightarrow{AM}$ in terms of **a** and **b**.
Give your answer in its simplest form.

$\overrightarrow{AM} =$ ..... [3]