Examiner only

13. The diagram shows a quadrilateral *OABC*.

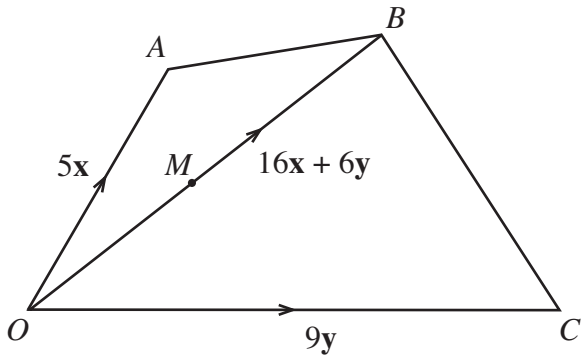

Diagram not drawn to scale.

In the quadrilateral *OABC*, the vectors **OA, OB** and **OC** are given by **OA** = 5**x**, **OB** = 16**x** + 6**y** and **OC** = 9**y**.
Given that *M* is the midpoint of *OB*, express **each** of the following in terms of **x** and **y** in their simplest form.

(a) **OM**

.....

.....

.....

[1]

(b) **AC**

.....

.....

.....

[1]