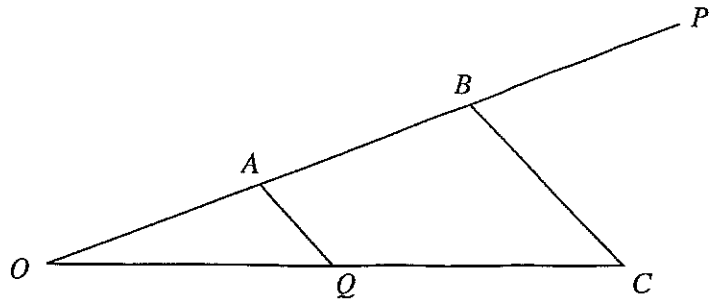
IGCSE – Vectors Paper 2 - 4

Oct 01 Paper 2

19



NOT TO SCALE

Q is the midpoint of OC and $OABP$ is a straight line with $OA = AB = BP$.
$\overrightarrow{OP} = 6\mathbf{p}$ and $\overrightarrow{OQ} = \mathbf{q}$.
Find in terms of $\mathbf{p}$ and/or $\mathbf{q}$,

(a) $\overrightarrow{OB}$,

Answer (a) $\overrightarrow{OB}$ = ... [1]

(b) $\overrightarrow{BC}$,

Answer (b) $\overrightarrow{BC}$ = ... [1]

(c) $\overrightarrow{AQ}$.

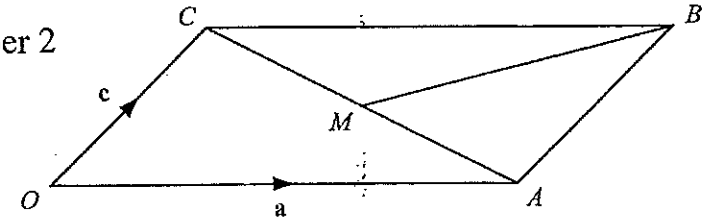
Answer (c) $\overrightarrow{AQ}$ = ... [1]

(d) Use your answers to **parts (b)** and **(c)** to explain why AQ is parallel to BC.

Answer (d) ..... [1]

May 04 Paper 2

16



$OABC$ is a parallelogram. $\overrightarrow{OA} = \mathbf{a}$, $\overrightarrow{OC} = \mathbf{c}$ and M is the mid-point of CA.
Find in terms of $\mathbf{a}$ and $\mathbf{c}$

(a) $\overrightarrow{OB}$,

Answer(a) ..... [1]

(b) $\overrightarrow{CA}$,

Answer(b) ..... [1]

(c) $\overrightarrow{BM}$.

Answer(c) ..... [2]