23

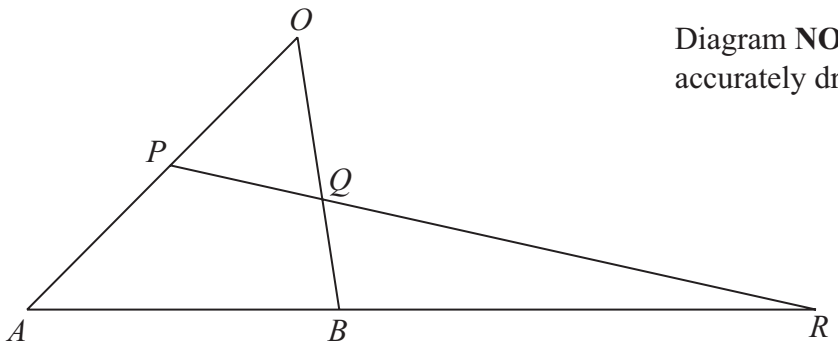


Diagram **NOT** accurately drawn

OAB is a triangle.
P is the midpoint of *OA*
Q is a point on *OB*

ABR and *PQR* are straight lines.

$\overrightarrow{OA} = 12\mathbf{a}$ $\overrightarrow{OB} = 8\mathbf{b}$

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

.....

(1)

$AB : BR = 1 : 2$ $\overrightarrow{OQ} = n\mathbf{b}$

(b) Use a vector method to find the value of n

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$n =$ .....

(4)

(Total for Question 23 is 5 marks)

Turn over for Question 24

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