17 The diagram shows parallelogram $ABCD$.

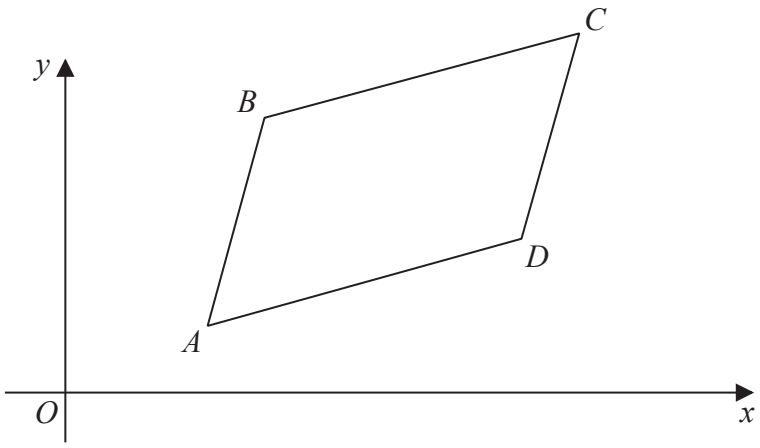


Diagram **NOT** accurately drawn

$\overrightarrow{AB} = \begin{pmatrix} 2 \\ 7 \end{pmatrix}$ $\overrightarrow{AC} = \begin{pmatrix} 10 \\ 11 \end{pmatrix}$

The point B has coordinates (5, 8)

(a) Work out the coordinates of the point C.

(..... , ...)

(3)

The point E has coordinates (63, 211)

(b) Use a vector method to prove that ABE is a straight line.

(2)

(Total for Question 17 is 5 marks)

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