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## Please do not write on this sheet

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#### June 2019 Paper 2H Question 14

1 Here are two vectors.

$$\overrightarrow{AB} = \begin{pmatrix} 6 \\ -9 \end{pmatrix} \qquad \overrightarrow{CB} = \begin{pmatrix} 1 \\ 3 \end{pmatrix}$$

Find the magnitude of  $\overrightarrow{AC}$ 

(3 marks)

#### **Sample Paper 2H Question 23**

**2** *ABCD* is a parallelogram

$$\overrightarrow{AB} = \begin{pmatrix} 2\\3 \end{pmatrix} \qquad \overrightarrow{AC} = \begin{pmatrix} 9\\4 \end{pmatrix}$$

Find the magnitude of  $\overrightarrow{BC}$ 

(3 marks)

### **January 2019 Paper 2H Question 23**

*ABCD* is a trapezium

$$\overrightarrow{DC} = 3\overrightarrow{AB}$$

$$\overrightarrow{DA} = \begin{pmatrix} -2\\3 \end{pmatrix} \qquad \overrightarrow{DB} = \begin{pmatrix} -1\\7 \end{pmatrix}$$

Find the exact magnitude of  $\overrightarrow{BC}$ 

(5 marks)