

Name: _____

IGCSE
Vectors (Magnitude)

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

June 2019 Paper 2H Question 14

1 Here are two vectors.

$$\vec{AB} = \begin{pmatrix} 6 \\ -9 \end{pmatrix} \quad \vec{CB} = \begin{pmatrix} 1 \\ 3 \end{pmatrix}$$

Find the magnitude of \vec{AC}

.....
(Total for Question 1 is 3 marks)

Sample Paper 2H Question 23

2 $ABCD$ is a parallelogram

$$\vec{AB} = \begin{pmatrix} 2 \\ 3 \end{pmatrix} \quad \vec{AC} = \begin{pmatrix} 9 \\ 4 \end{pmatrix}$$

Find the magnitude of \vec{BC}

.....
(Total for Question 2 is 3 marks)

January 2019 Paper 2H Question 23

3 $ABCD$ is a trapezium

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

$$\vec{DA} = \begin{pmatrix} -2 \\ 3 \end{pmatrix} \quad \vec{DB} = \begin{pmatrix} -1 \\ 7 \end{pmatrix}$$

Find the exact magnitude of \vec{BC}

.....
(Total for Question 3 is 5 marks)