

Bearings

Please write clearly in block capitals

Forename:

Surname:

Materials

For this paper you must have:

- mathematical instruments



You **can** use a calculator.

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

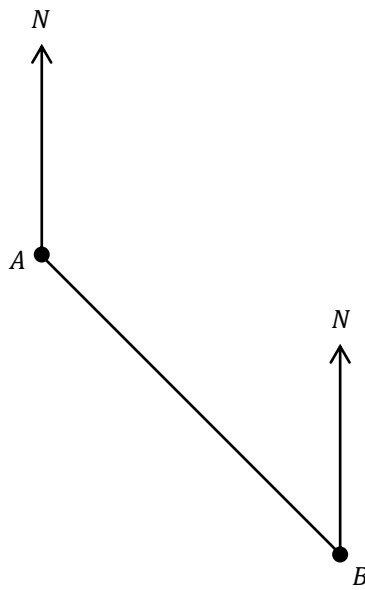
- The marks for questions are shown in brackets.
- You may ask for graph paper, tracing paper and more answer paper. These must be tagged securely to this answer book.

Advice

- In all calculations, show clearly how you work out your answer.

1 By measuring the angles below, state the bearings of:

(Level 5)



1(a) A From B

[1 mark]

Answer _____ °

1(b) B From A

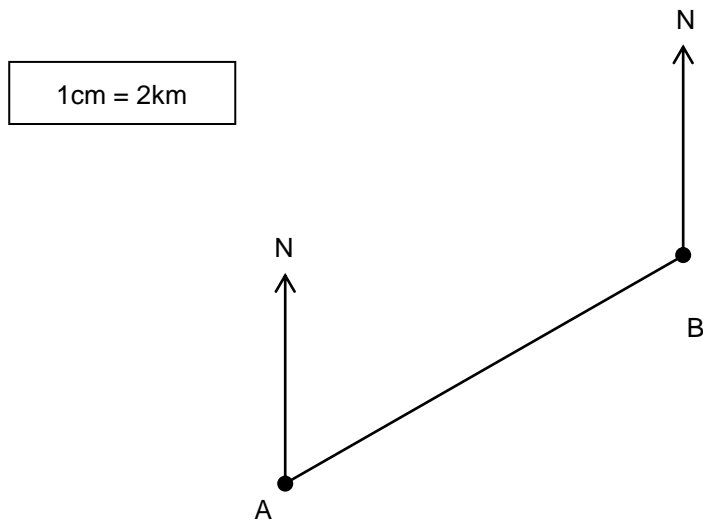
[1 mark]

Answer _____ °

Turn over ►

2 A diagram of a bearing is shown below.

(Level 5)



By measuring the diagram given:

2(a) State the bearing of B from A.

[1 mark]

Answer _____

2(b) State the bearing of A from B.

[1 mark]

Answer _____

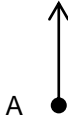
2(c) Find the distance between A and B.

[1 mark]

Answer _____ km

- 3 The location C is on a bearing of 140° from A.
 The bearing of C from B is 250° .
 Find the location C and mark it on the diagram below.

(Level 5)

[3 marks]

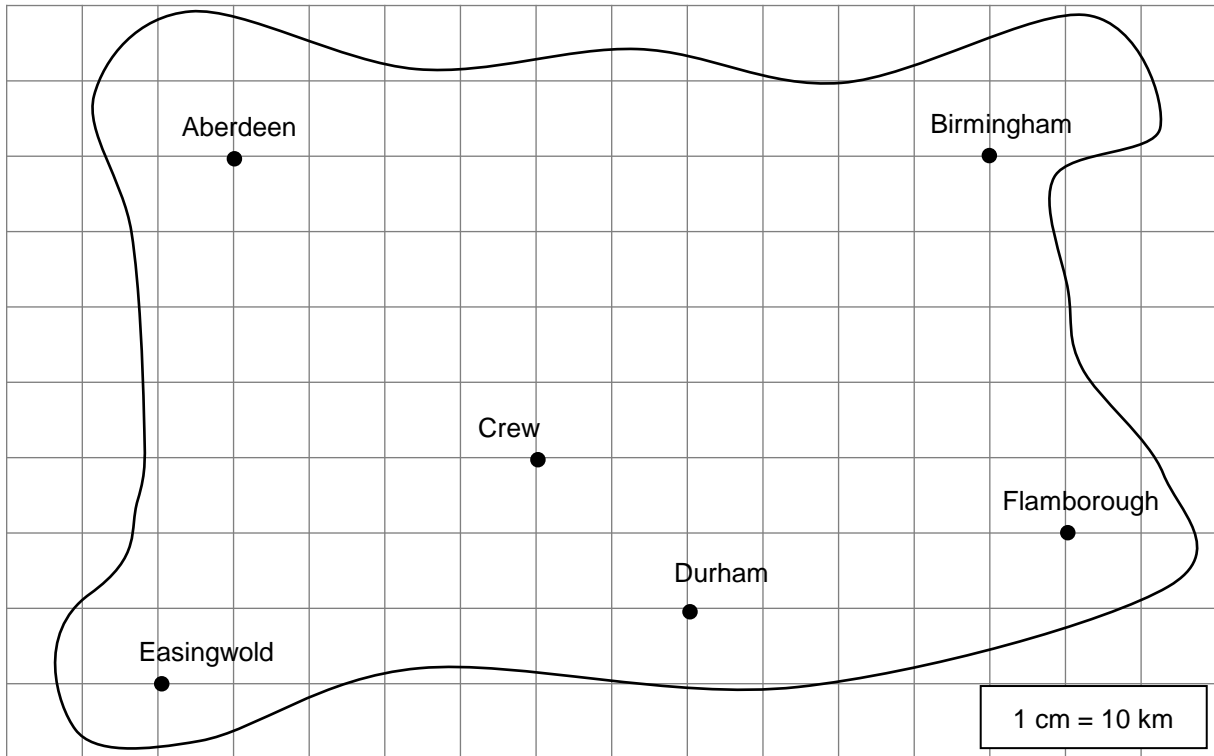
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4 A map with a scale is given below.

(Level 5)



Give the bearings and the distance for the following journeys.

4(a) Aberdeen to Flamborough

[1 mark]

Bearing = _____ Distance = _____

4(b) Birmingham to Crewe

[1 mark]

Bearing = _____ Distance = _____

4(c) Durham to Crewe.

[1 mark]

Bearing = _____ Distance = _____

5 Starting at point A, Freya makes a journey as follows: (Level 6)

8km on a bearing of 135° to B

4km, on a bearing of 180° to C

6km on a bearing of 315° to D

5(a) Use the space below to draw a suitable diagram to represent her journey.

[3 marks]

1 cm = 1 km



5(b) Freya wants to return to A.

What is the bearing of A from D?

[1 mark]

Turn over for next question

6 The bearing of C from A is 190° , and C is 5km from A.

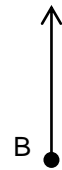
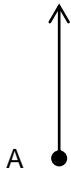
(Level 6)

The bearing of D from B is 270° , and D is 7km from A.

6(a) Draw points C and D on the diagram below using the information given.

[2 marks]

1 cm = 1 km



6(b) Work out the bearing of C from D, and give the distance they are apart.

[2 mark]

Turn over for next question

7 George needs to take the route as follows. (Level 6)

6km on a bearing of 080° from A to B

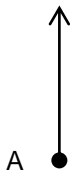
5km on a bearing of 160° from B to C

The scale is $1.5\text{cm} = 1\text{km}$

However, George uses an incorrect scale of $1\text{cm} = 1\text{km}$ and ends up at D.

What bearing and distance does he need to take to end up at the correct destination of C?

[4 marks]



Bearing = _____

Distance = _____

End of Questions