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Bishops Online Tutoring

Education Consultancy

Edexcel GCSE Mathematics
BEARINGS

Materials Required:

- Pen
- HB Pencil
- Ruler (in centimetres and millimetres)
- Protractor
- Compass

Instructions:

- Use a black ink pen to answer all questions
- Fill your name in the section below
- Answer the questions in the spaces provided
- Show your working out for all answers

Information:

- The marks allocated for each question are displayed within brackets – utilise this information to gauge the appropriate amount of time to dedicate to each question
- Questions marked with an asterisk (*) will assess your written communication; be careful of spelling, punctuation and grammar with these questions

Advice:

- Carefully read the question before attempting to answer it
- Be vary of time and try to answer every question
- If you have enough time in the end, go back and check your answers. A good way to check your answers is to retry the question with the hope of getting the same answer as before without looking at your working out from before
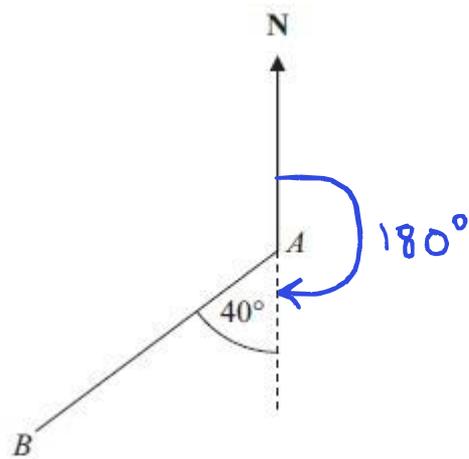
NO CALCULATOR ALLOWED
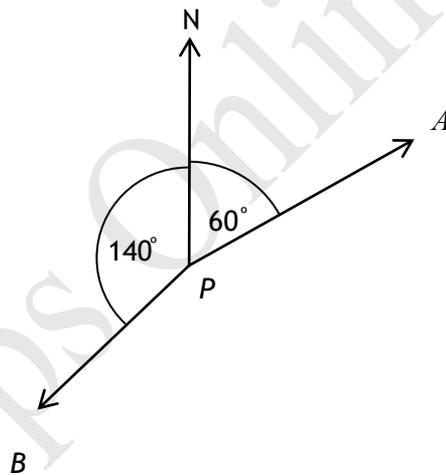
NAME:

1.

N

Diagram **NOT**
accurately drawn

A

$180°$

$40°$

B

Work out the bearing of *B* from *A*.

→Starting Point

$180 + 40 = 220$

................**220**........ °

(2 marks)

2.

N

A

$60°$

$140°$

P

B

Bearings are
always 3
digits

(a) Write down the bearing of *A* from *P*.

................**060**........ °

(b) Work out the bearing of *B* from *P*.

$360 - 140 = 220$

................**220**........ °

(3 marks)

3.

North

B

$29°$

$107°$

Measure the acute
angle and then
take from $360°$

A
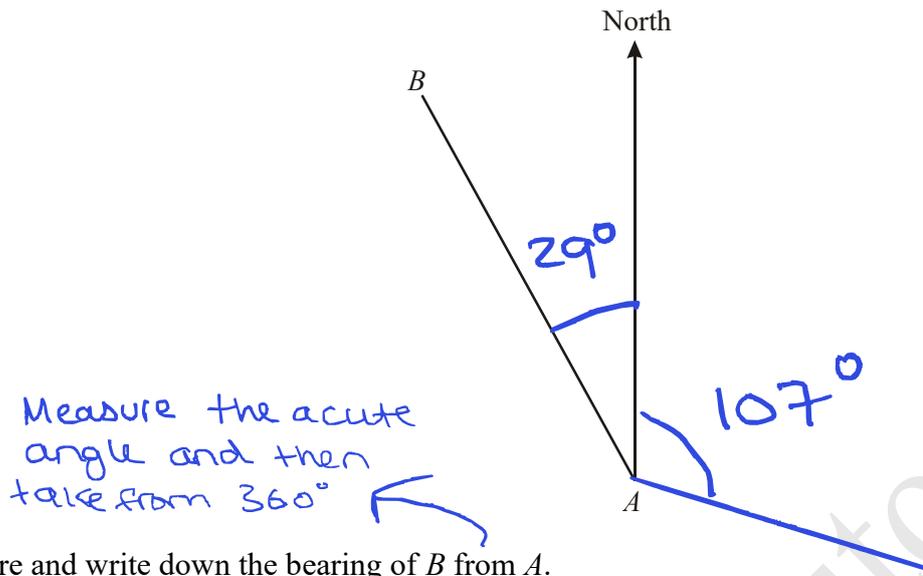
(a) Measure and write down the bearing of B from A.

$360 - 29 = 331$

............331............ °

(1)

(b) On the diagram, draw a line on a bearing of 107° from A.

(1)

(2 marks)

4. The diagram shows the position of two ports P and Q on a map.

N

N

Q

$150°$

$48°$

6cm

P

×R
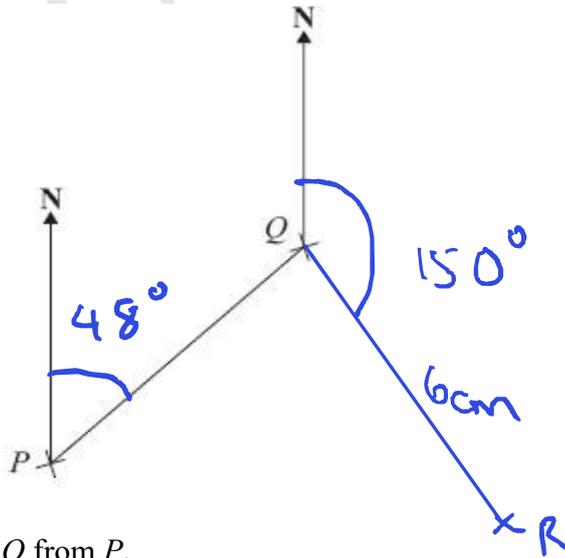
(a) Measure the bearing of Q from P.

............048............ °

(1)
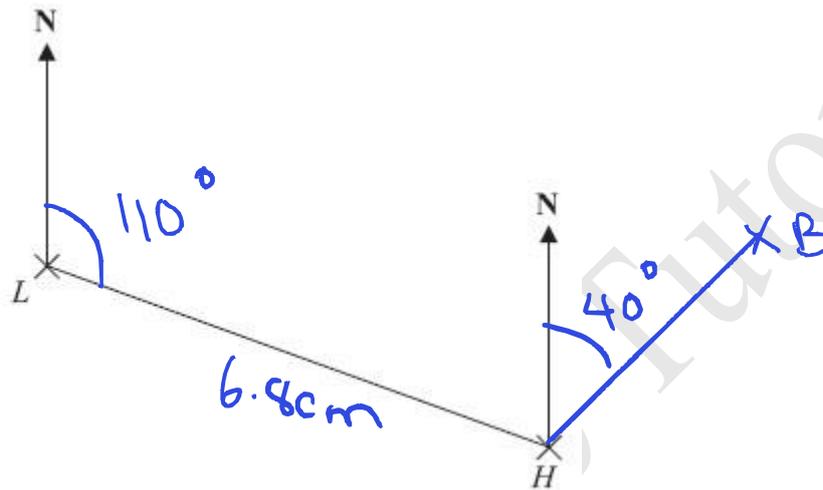
A rock R is on a bearing of 150° from Q.
On the map R is 6 cm from Q.

(b) Mark the position of R with a cross (×) and label it R.

(2)

(3 marks)

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5. The diagram shows the position of a lighthouse L and a harbour H.

The scale of the diagram is 1 cm represents 5 km.

(a) Work out the real distance between L and H.

$6.8 \times 5 = 34$

.... 34 .... km

(1)

(b) Measure the bearing of H from L.

.... 110 .... °

(1)

$= 4cm$

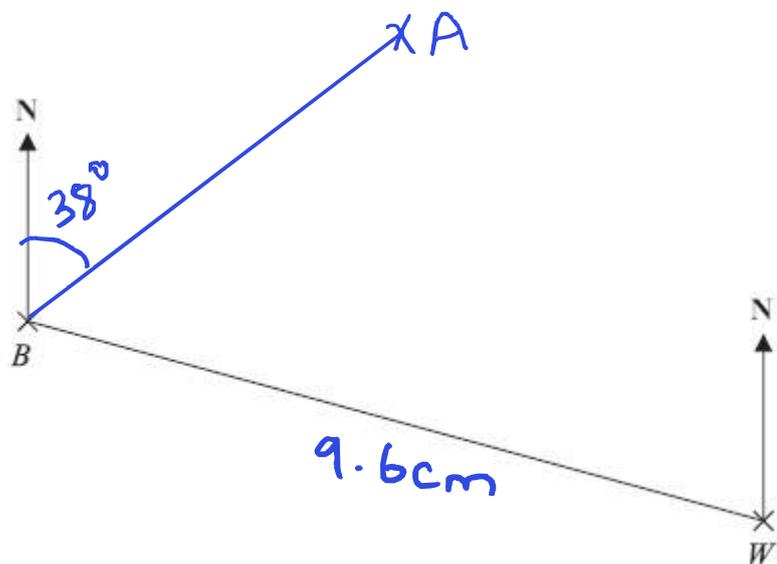A boat B is 20 km from H on a bearing of 040°

(c) On the diagram, mark the position of boat B with a cross (×).

Label it B.

(1)

(4 marks)

6. The diagram shows the positions of two villages, Beckhampton (*B*) and West Kennett (*W*).

×A

N

38°

B

9.6cm

N

W

Scale: 4 cm represents 1 km.

(a) Work out the real distance, in km, of Beckhampton from West Kennett.

9.6 ÷ 4 = 2.4 1cm

.... 2.4 .... km

(2)

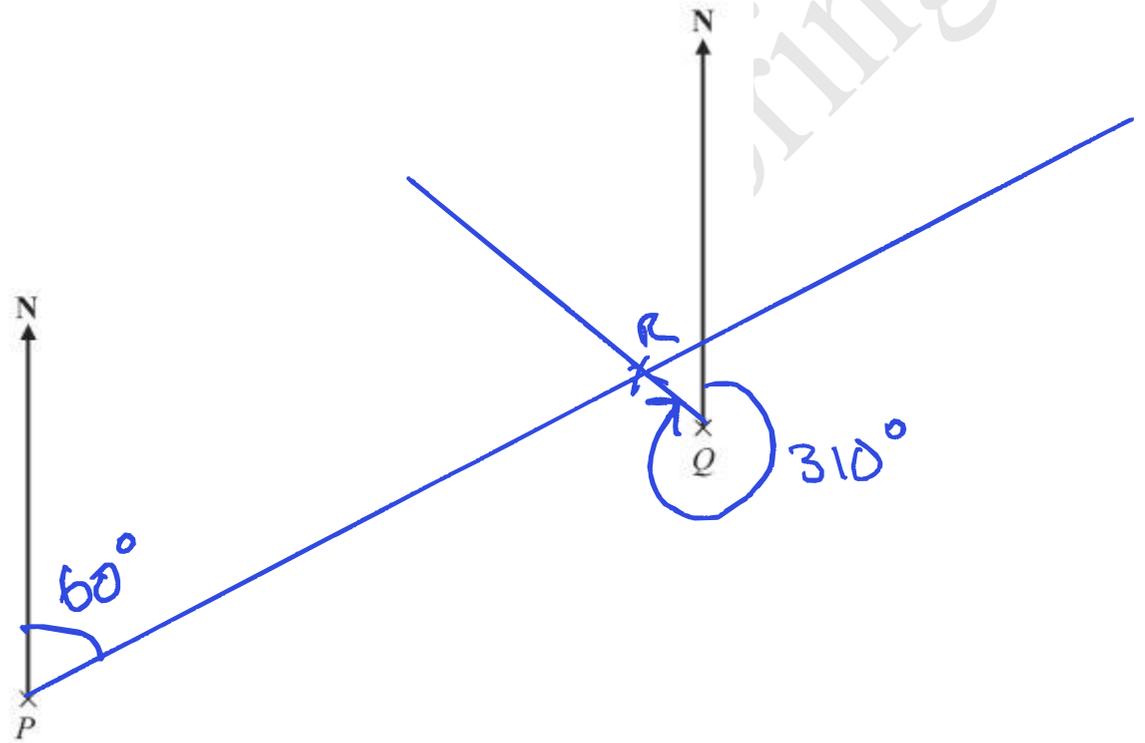The village, Avebury (*A*), is on a bearing of 038° from Beckhampton.

On the diagram, *A* is 6 cm from *B*.

(b) On the diagram, mark *A* with a cross (×).
Label the cross *A*.

(2)

(4marks)

7. The diagram shows the position of two boats, *P* and *Q*.

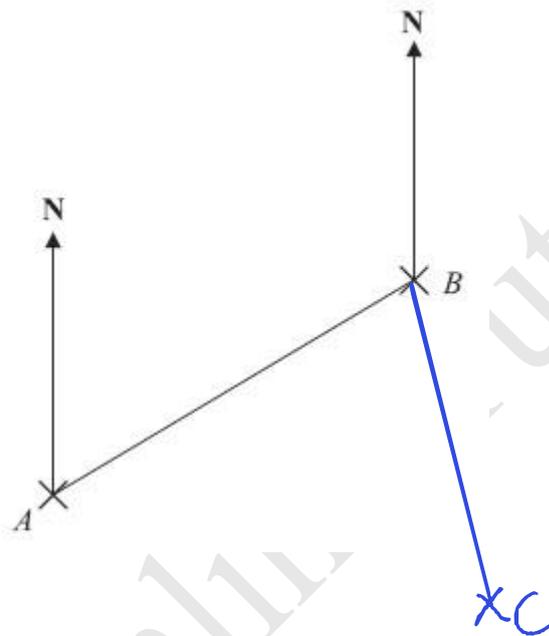The bearing of a boat *R* from boat *P* is 060^0
The bearing of boat *R* from boat *Q* is 310^0

In the space above, draw an accurate diagram to show the position of boat *R*. Mark
the position of boat *R* with a cross (X).
Label it *R*.

(3 marks)

8. The diagram shows the positions of two telephone masts, *A* and *B*, on a map.

(a) Measure the bearing of *B* from *A*.

059 °

(1)

Another mast *C* is on a bearing of 160° from *B*.

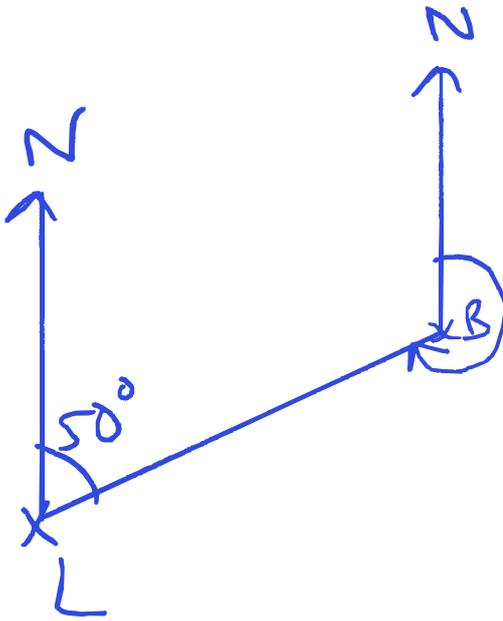On the map, *C* is 4 cm from *B*.

(b) Mark the position of *C* with a cross (X) and label it *C*.

(2)

(3 marks)

9. The bearing of a ship from a lighthouse is 050°

Work out the bearing of the lighthouse from the ship.

230°

(2 marks)