BEARINGS

Pearson Edexcel - Tuesday 19 May 2020 - Paper 1 (Non-Calculator) Foundation Tier

1.

13 The diagram shows two points, *A* and *B*, on a map.
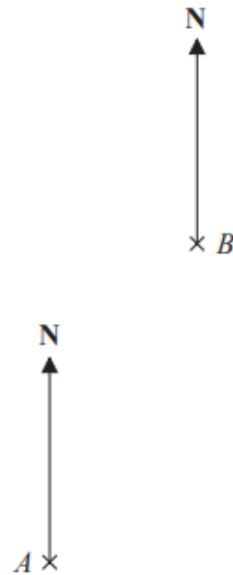
N

Diagram accurately drawn

× *B*

N

A ×

Scale: 1 to 25 000

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

.... °

(1)

(b) Work out the real distance between *A* and *B*.
Give your answer in kilometres.

.... kilometres

(3)

(Total for Question 13 is 4 marks)

2.

9 Here is a map of an island.

N

Diagram accurately drawn

Backley ✗

N

Cremford ✗

Scale: 1 cm represents 0.5 km
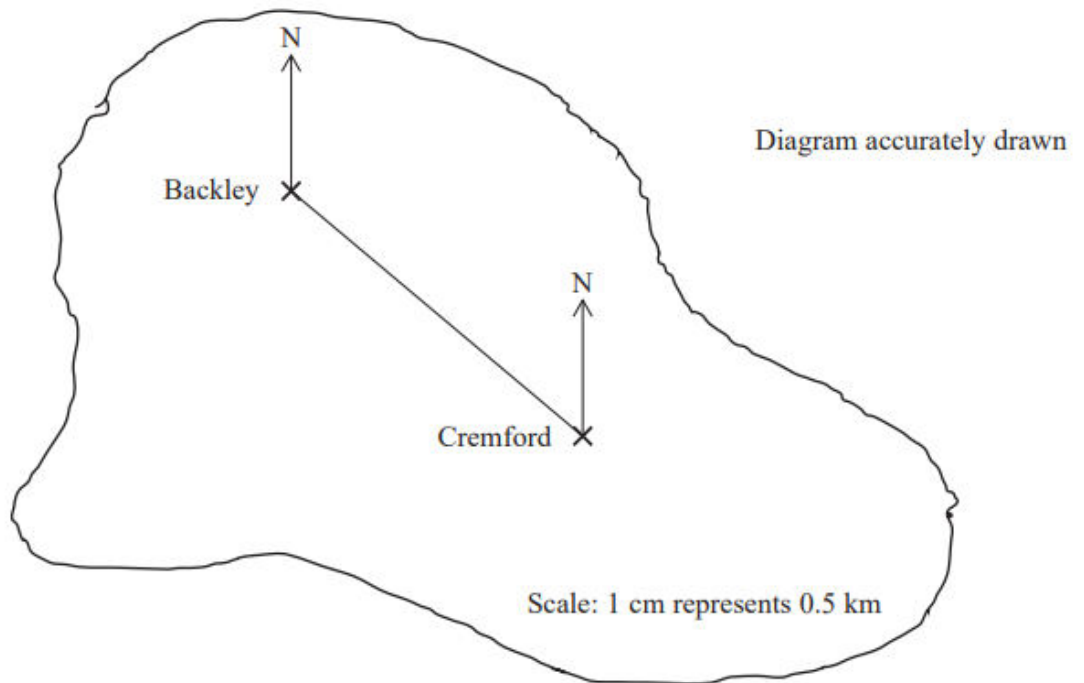
A straight road joins the two villages, Backley and Cremford.

(a) Work out the real distance between the two villages.

....................................km
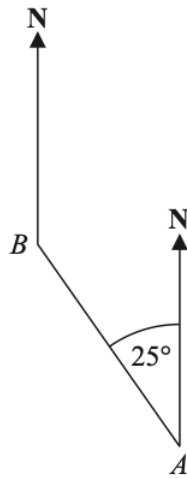
(2)

(b) Find the bearing of Cremford from Backley.

°

....

(1)

(Total for Question 9 is 3 marks)

3.

18 The diagram shows the positions of two churches, *A* and *B*.

Amber says,

  "The bearing of church *B* from church *A* is 025°"
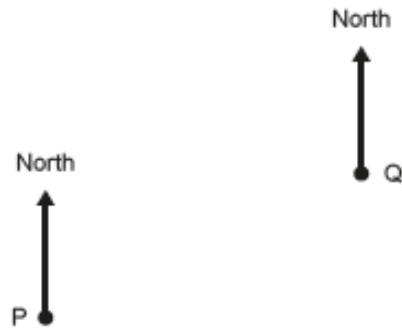
Amber is wrong.
Explain why.

....

....

(Total for Question 18 is 1 mark)

4.

9 The scale drawing shows the positions of two boats, P and Q.

Scale: 1 cm represents 4 km

(a) Find the actual distance between boat P and boat Q.

(a) .... km **[2]**

(b) Measure the bearing of boat Q from boat P.

(b) ....° **[1]**
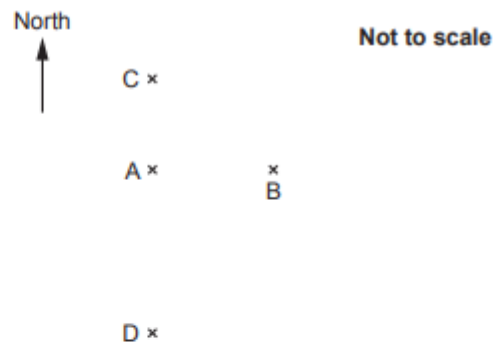
(c) A lighthouse is

- 18 km from boat P
- on a bearing of 200° from boat Q.

On the scale drawing, mark a possible position of the lighthouse with a cross. **[2]**

5.

22 A, B, C and D are four towns.

B is 25 kilometres due East of A.
C is 25 kilometres due North of A.
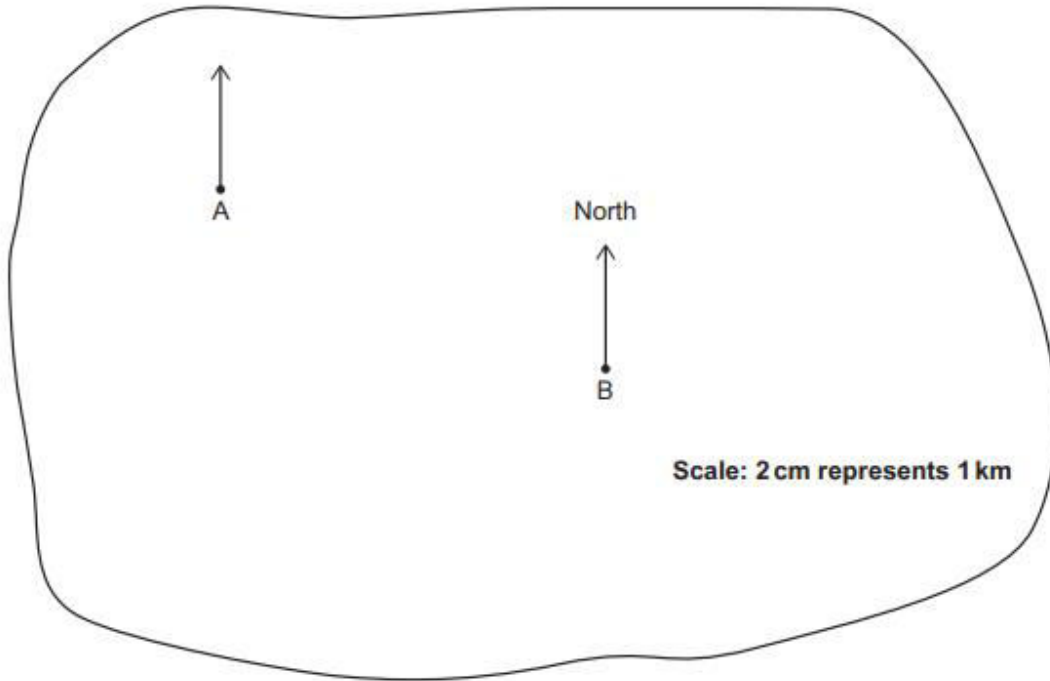D is 45 kilometres due South of A.

North

Not to scale

C ×

A ×   ×
              B

D ×

(a) Work out the bearing of B from C.

(a) ....° **[2]**

(b) Calculate the bearing of D from B.

(b) ....° **[4]**

6.

4 A and B are two farms on this map.

North

Scale: 2 cm represents 1 km

Use the map to complete these sentences.

(a) **(i)** The distance from A to B is .... km.   **[2]**

(ii) The bearing of B from A is .... °.   **[1]**

(b) C is another farm.
C is 2.5 km from B on a bearing of 230°.

Mark and label the position of C on the map with a cross.   **[2]**

7.

16 Otis keeps bees in two beehives.
They are marked P and Q in the scale drawing below.

Scale: 1 cm represents 50 metres

North

P

· Q
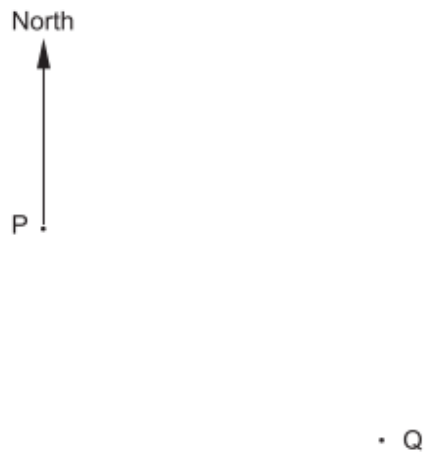
(a) If Otis walks at about 2 m/s, estimate how long it takes him to walk from beehive P to beehive Q.

(a) .... **[3]**

(b) Bees can indicate to other bees where flowers are.

A bee indicates that there are flowers

- on a bearing of 055° from P
- at a distance of 400 m from P.

On the scale drawing, show the point where the flowers are.
Label this point F. [2]

(c) Otis plants some fruit trees, which are

- the same distance from P and from Q
- 200 m or less from P.

Indicate on the scale drawing where Otis plants the trees.
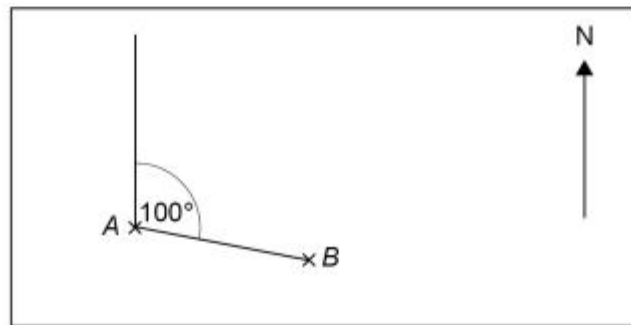You must show all your construction lines. [4]

8.

16 (a)   Here is a map showing points *A* and *B*.

Kemal wants to measure the bearing of **A from B**.

He draws two lines and measures the angle between them.

Kemal says that the bearing of *A* from *B* is 100°

Is his method correct?

Give a reason for your answer.

[1 mark]

_____

_____

_____

_____

_____

16 (b)   On a different map, the bearing of *D* from *C* is 045°

Nina says,
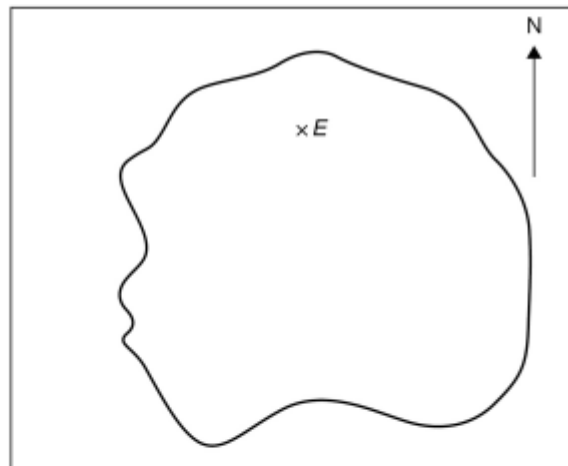
"*D* is North West of *C*."

Is Nina correct?

Give a reason for your answer.

[1 mark]

_____

_____

16 (c)   This map shows an airport, *E*, on an island.

Scale: 1 cm represents 100 km

A plane flies due South from the airport.

How far does it fly until it reaches the sea?

[3 marks]

_____

Answer _____ km

AQA Thursday 8 November 2018 – Morning (Calculator) Foundation Tier

9.

4   What is the angle of turn clockwise from South West to East?

N

Circle your answer.

[1 mark]

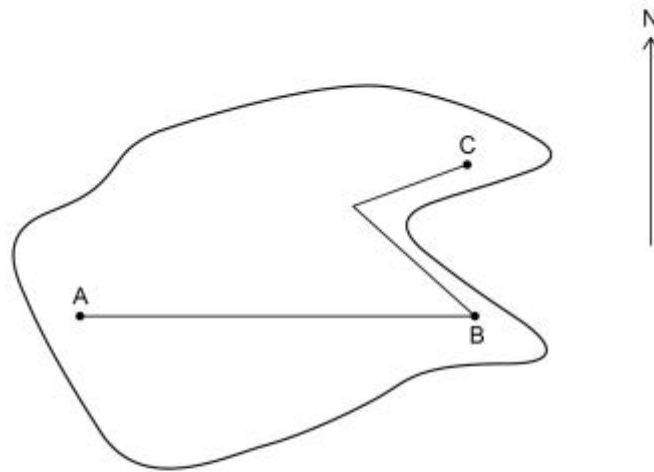45°   135°   225°   315°

10.

17   Here is a map of an island with cities A, B and C.

The straight lines represent roads.

Scale: 1 cm represents 200 km

17 (a)   A is due West of B.

Write down the bearing of A from B.

[1 mark]

Answer _____ °

17 (b)   Umar drives from A to B on the route shown.

Kaz drives from B to C on the route shown.

Use the map to work out how much further Umar drives than Kaz.

You **must** show your working.

[5 marks]

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Answer _____ km

17 (b)   Umar drives from A to B on the route shown.

Kaz drives from B to C on the route shown.

Use the map to work out how much further Umar drives than Kaz.
You **must** show your working.

[5 marks]

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Answer _____ km