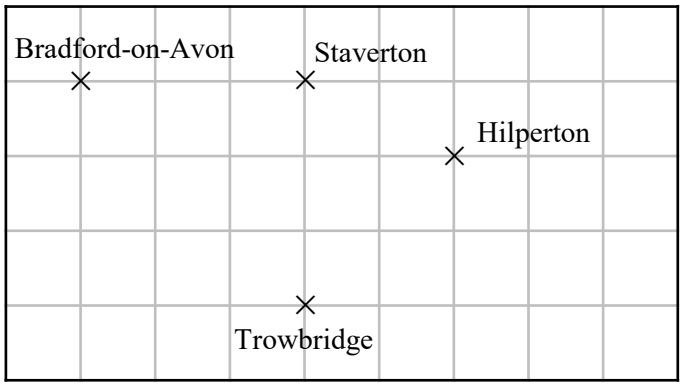
Bearings

SCAN ME

REVISE THIS TOPIC

1 Here is a map of some towns and villages on a square centimetre grid.



(a) Write down the bearing of Trowbridge from Staverton.

180 °

(1)

(b) Write down the bearing of Bradford-on-Avon from Staverton.

270 °

(1)

(c) Write down the bearing of Hilperton from Trowbridge.

045 °

(1)

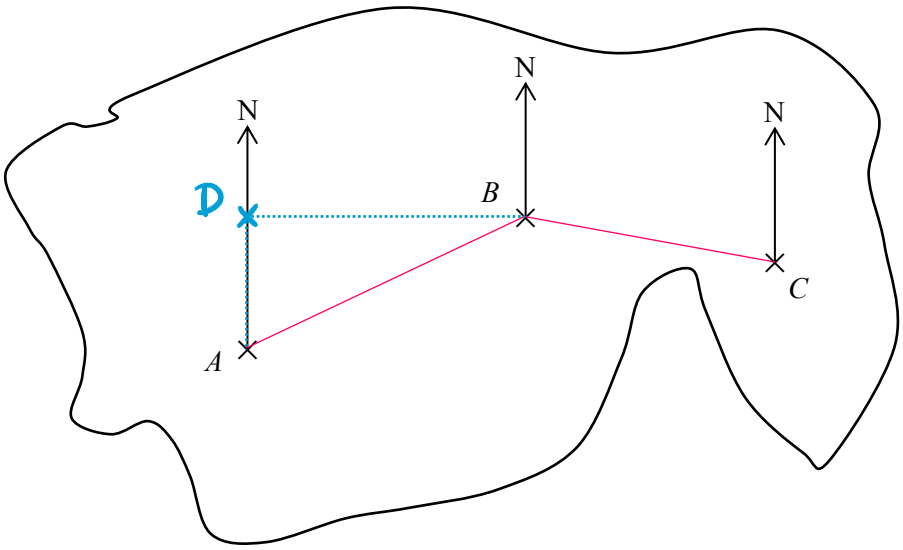
(d) Write down the bearing of Trowbridge from Bradford-on-Avon

135 °

(1)

(Total for Question 1 is 4 marks)

2 Here is a map of an island with towns A, B and C.



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

065 °

(1)

(b) Find the bearing of town C from town B.

100 °

(1)

(c) Town D is

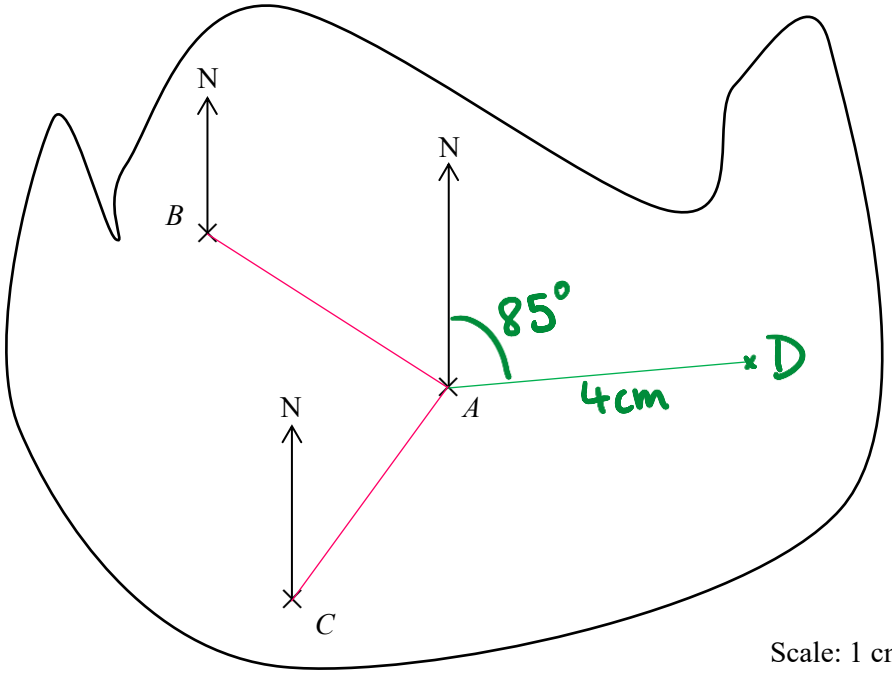
due North of town A
due West of town B

Mark town D onto the map.

(1)

(Total for Question 2 is 3 marks)

3 Here is a map of an island with towns A, B and C.



Scale: 1 cm represents 5 km

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

303 °

(1)

(b) Find the bearing of town C from town A.

215 °

(1)

(c) Town D is 20 km from town A.
The bearing of town D from town A is 085°

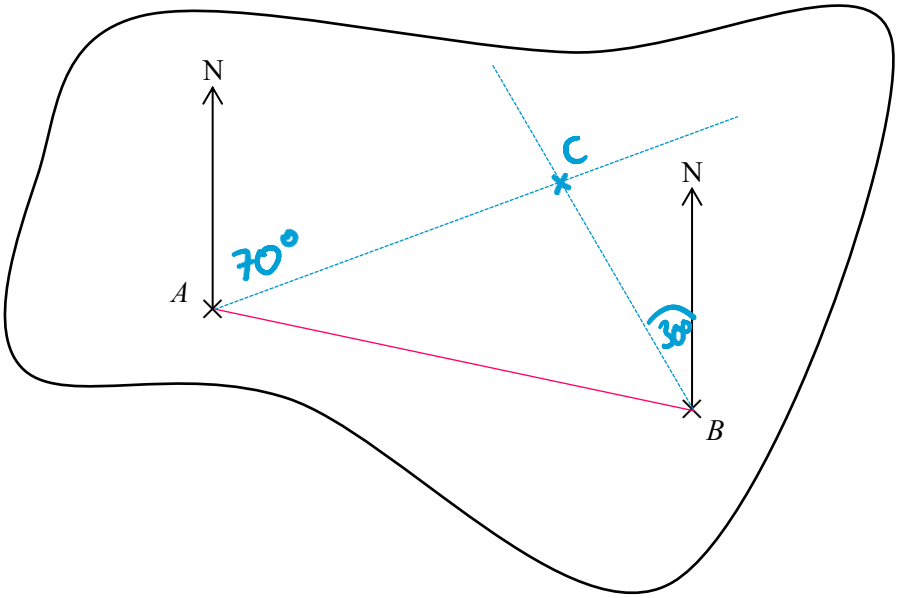
Mark town D onto the map.

1cm : 5km
4cm : 20km

(2)

(Total for Question 3 is 4 marks)

4 Here is a map of an island with towns A and B.



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

102 °

(1)

(b) Find the bearing of town A from town B.

282 °

(1)

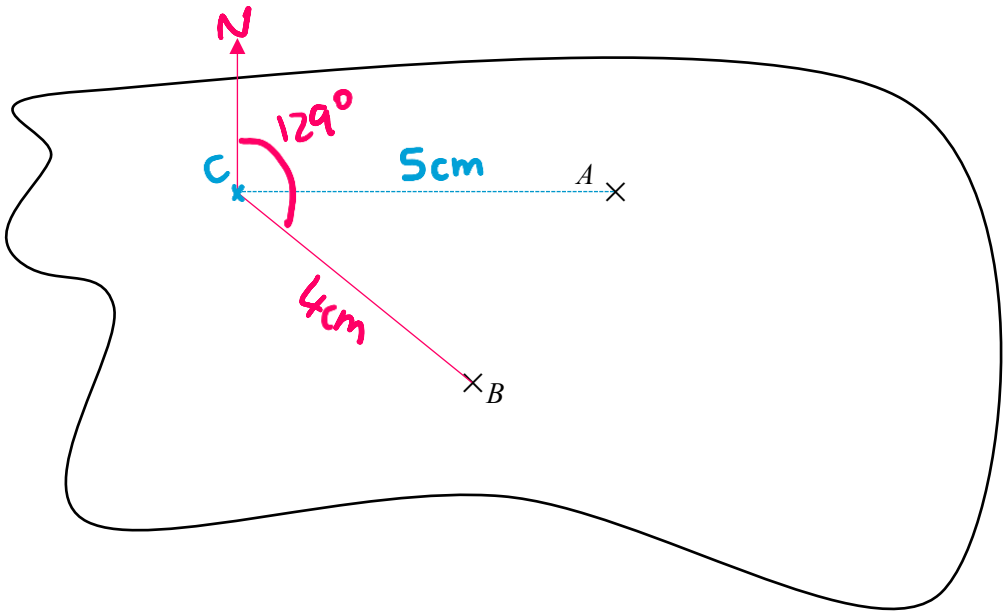
(c) The bearing of town C from town A is 070°
The bearing of town C from town B is 330°

Mark town C onto the map.

(2)

(Total for Question 4 is 4 marks)

5 Here is a map of an island with towns A and B.



Scale: 1 cm represents 3 km

(a) Town C is 15 km due West of town A.

Mark town C onto the map.

1cm : 3 KM) x5
5cm : 15 KM

(2)

(b) Find the bearing of town B from town C.

129 °

(1)

(c) Work out the actual distance between town B and town C.
Give your answer in kilometres.

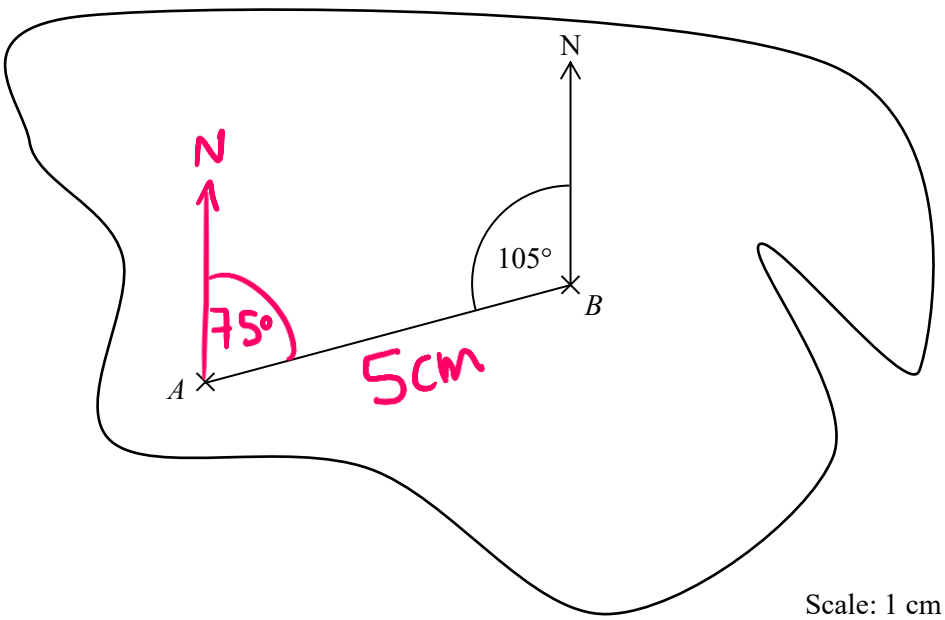
4 x 3 = 12

12 km

(2)

(Total for Question 5 is 5 marks)

6 Here is a map of an island with towns A and B.



Scale: 1 cm represents 2.5 km

(a) Elijah says that the bearing of town A from town B is 105°
Explain why Elijah is incorrect.

bearings are measured clockwise

(1)

(b) Find the bearing of town B from town A.

075 °

(1)

(c) Work out the actual distance between town A and town B.
Give your answer in kilometres.

$5 \times 2.5 = 12.5$

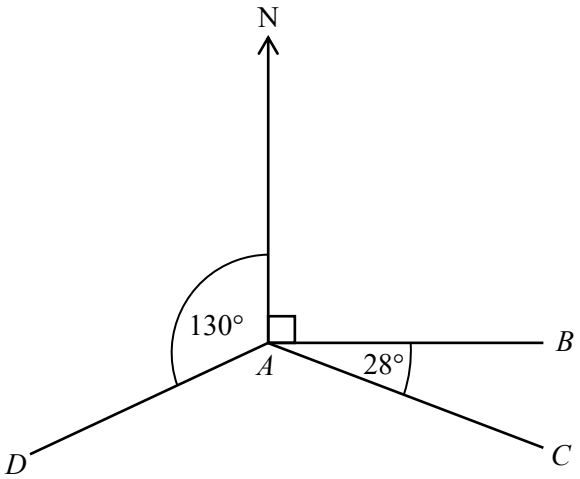
12.5 km

(2)

(Total for Question 6 is 4 marks)

If you do not print this on A4 full scale your answers to measurements questions will not match mine.

7 A, B, C and D are four points.



Not drawn accurately

(a) Find the bearing of B from A.

090 °

(1)

(b) Find the bearing of C from A.

90 + 28

118 °

(2)

(c) Find the bearing of D from A.

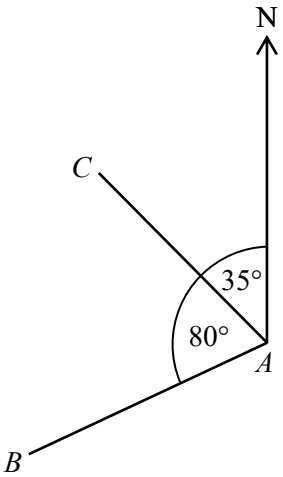
360 − 130

230 °

(2)

(Total for Question 7 is 5 marks)

8 A, B, and C are three points.



Not drawn accurately

(a) Find the bearing of C from A.

360 - 35

325 °

(1)

(b) Find the bearing of B from A.

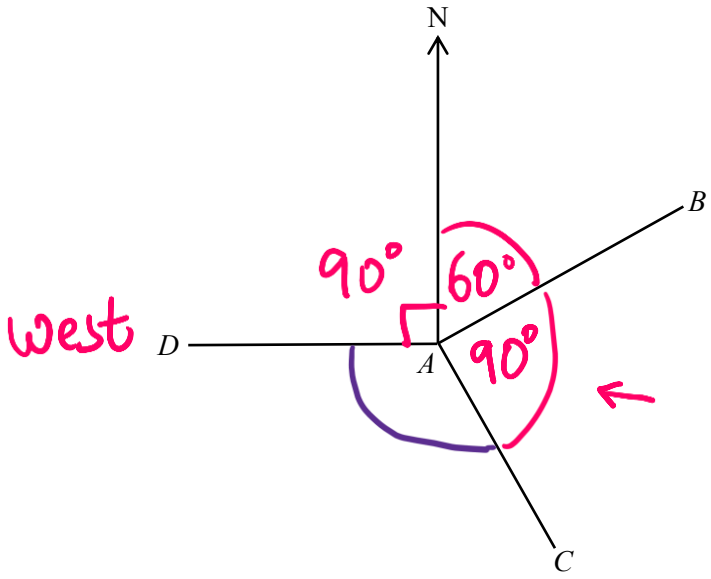
80 + 35 = 115
360 − 115 = 245

245 °

(2)

(Total for Question 8 is 3 marks)

9 A, B, C and D are four points.



Not drawn accurately

D is due West of A.
The bearing of B from A is 060°
The bearing of C from A is 150°

Work out Angle DAC : Angle BAC
Give your answer in its simplest form.

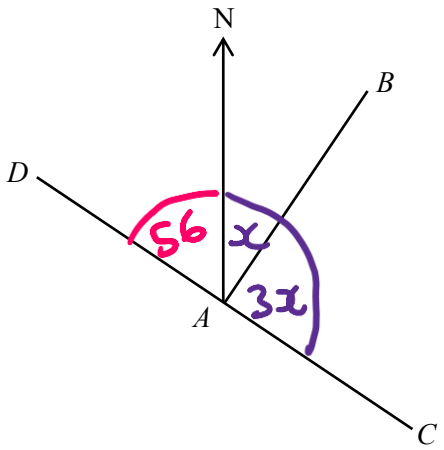
$90 + 60 + 90 = 240°$
$360 - 240 = 120°$

$\div 30$ ($120 : 90$) $\div 30$
$4 : 3$

$4 : 3$

(Total for Question 9 is 4 marks)

10 *A*, *B*, *C* and *D* are four points.
DAC is a straight line.



Not drawn accurately

The bearing of *D* from *A* = 304°
The bearing of *C* from *A* = 4 × the bearing of *B* from *A*.

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

$360 - 304 = 56$

$180 - 56 = 124$

$4x = 124$ ÷4

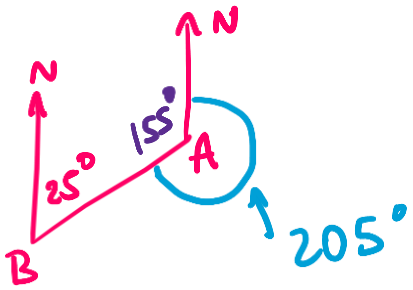
$x = 31$ ÷4

031 °

(Total for Question 10 is 4 marks)

11 The bearing of A from B is 025°

Work out the bearing of B from A.



180 - 25 = 155

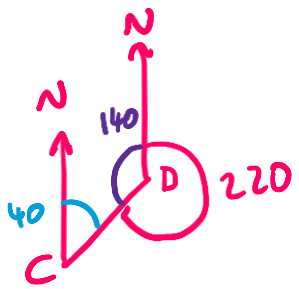
360 - 155 = 205

205 °

(Total for Question 11 is 2 marks)

12 The bearing of C from D is 220°

Work out the bearing of D from C.



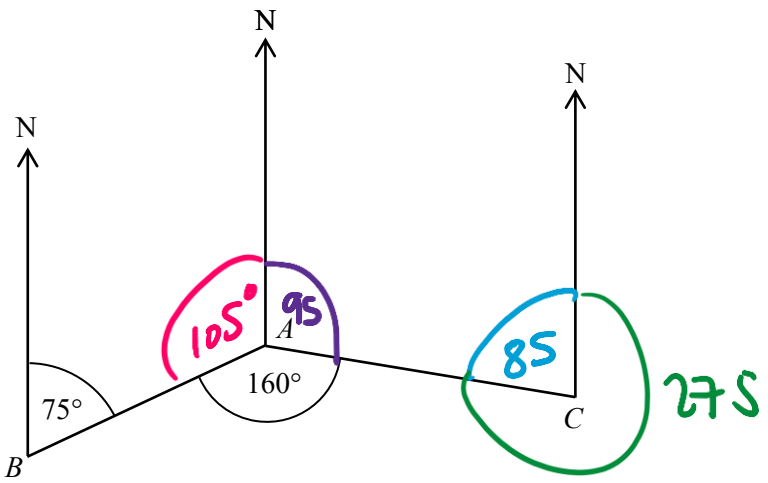
360 - 220 = 140

180 - 140 = 40

040 °

(Total for Question 12 is 2 marks)

13 A, B, and C are three points.



Not drawn accurately

Work out the bearing of A from C.

$180 - 75 = 105$

$360 - 105 - 160 = 95$

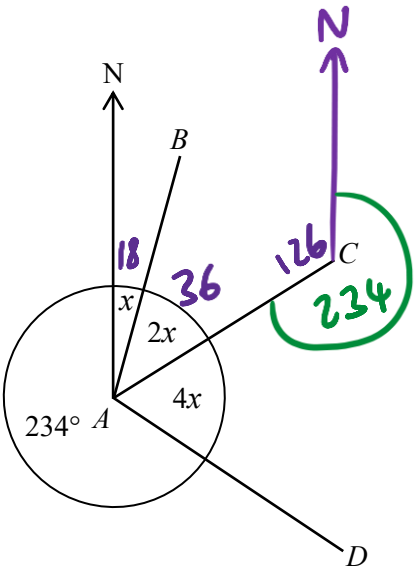
$180 - 95 = 85$

$360 - 85 = 275$

275 °

(Total for Question 13 is 4 marks)

14 A, B, C and D are four points.



Not drawn accurately

Work out the bearing of A from C.

$x + 2x + 4x + 234 = 360$

$7x + 234 = 360$

$7x = 126$

$x = 18$

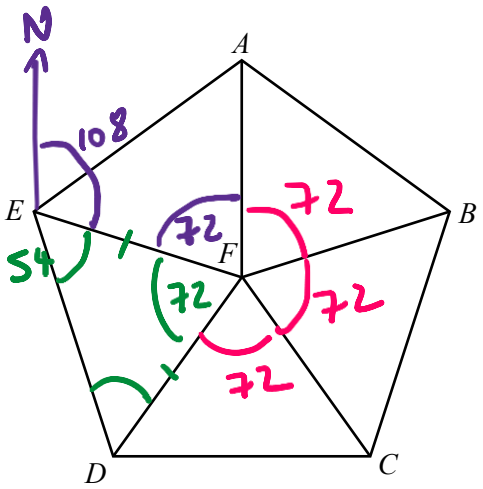
$180 - 18 - 36 = 126$

$360 - 126 = 234$

234 °

(Total for Question 14 is 5 marks)

15 5 congruent triangles are used to form regular pentagon *ABCDE*.



North

(a) Find the bearing of *D* from *F*.

360 ÷ 5 = 72
72 × 3 = 216

216 °

(2)

(b) Find the bearing of *F* from *E*.

180 - 72

108 °

(2)

(c) Find the bearing of *D* from *E*.

180 - 72 = 108
108 ÷ 2 = 54
108 + 54 = 162

162 °

(2)

(Total for Question 15 is 6 marks)