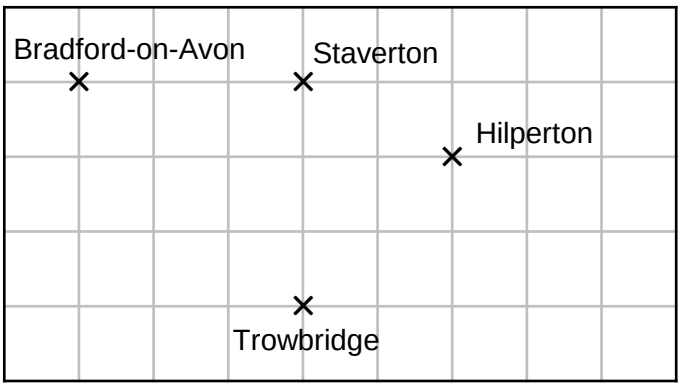
SCAN ME

Bearings

REVISE THIS TOPIC

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



1 (a) Write down the three-figure bearing of Trowbridge from Staverton. **[1 mark]**

Answer 180 °

1 (b) Write down the three-figure bearing of Bradford-on-Avon from Staverton. **[1 mark]**

Answer 270 °

1 (c) Write down the three-figure bearing of Hilperton from Trowbridge. **[1 mark]**

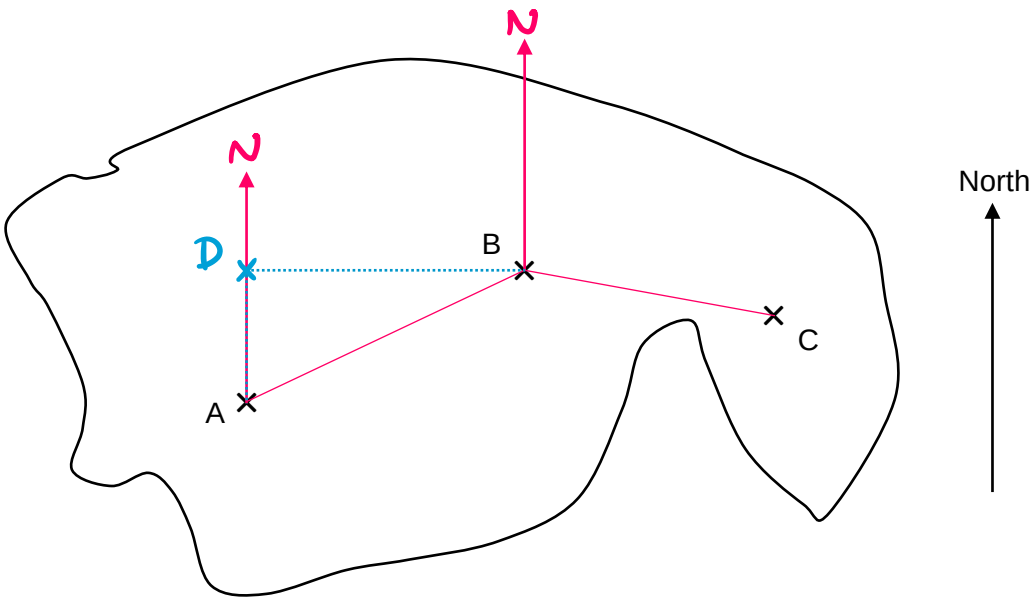
Answer 045 °

1 (d) Write down the three-figure bearing of Trowbridge from Bradford-on-Avon **[1 mark]**

Answer 135 °

4

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



2 (a) Find the three-figure bearing of town B from town A. **[1 mark]**

Answer 065 °

2 (b) Find the three-figure bearing of town C from town B. **[1 mark]**

Answer 100 °

2 (c) Town D is

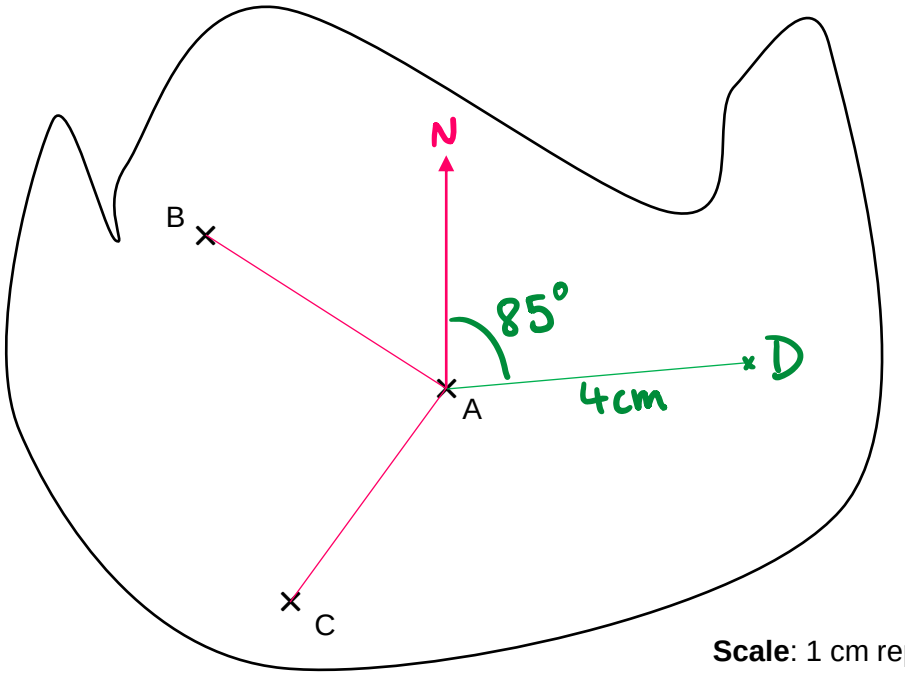
due North of town A

and

due West of town B

Mark town D onto the map. **[1 mark]**

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



Scale: 1 cm represents 5 km

3 (a) Find the three-figure bearing of town B from town A. **[1 mark]**

Answer 303 °

3 (b) Find the three-figure bearing of town C from town A. **[1 mark]**

Answer 215 °

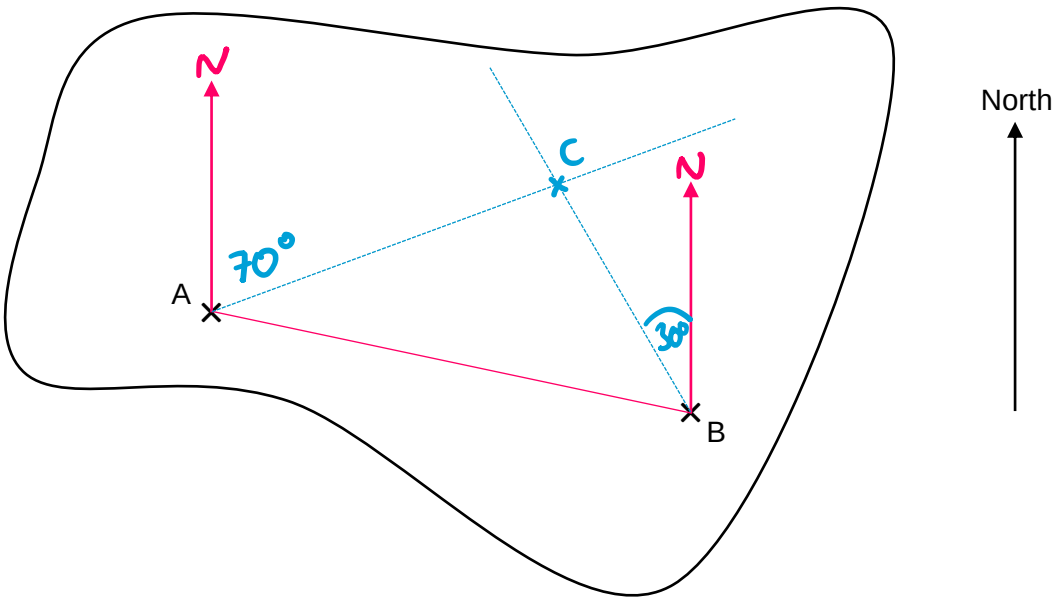
3 (c) Town D is 20 km from town A.
The bearing of town D from town A is 085°

Mark town D onto the map. **[2 marks]**

1cm : 5km
4cm : 20km

7

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



4 (a) Find the three-figure bearing of town B from town A. **[1 mark]**

Answer 102 °

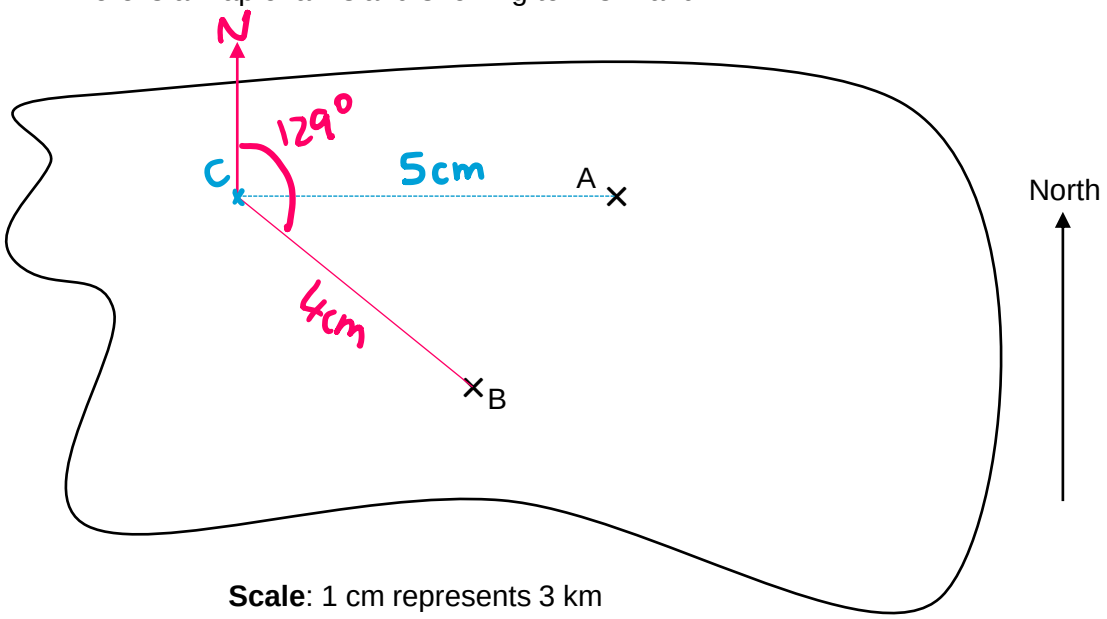
4 (b) Find the three-figure bearing of town A from town B. **[1 mark]**

Answer 282 °

4 (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 marks]**

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



Scale: 1 cm represents 3 km

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

Mark town C onto the map. **[2 marks]**

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

5 (b) Find the three-figure bearing of town B from town C. **[1 mark]**

Answer 129 °

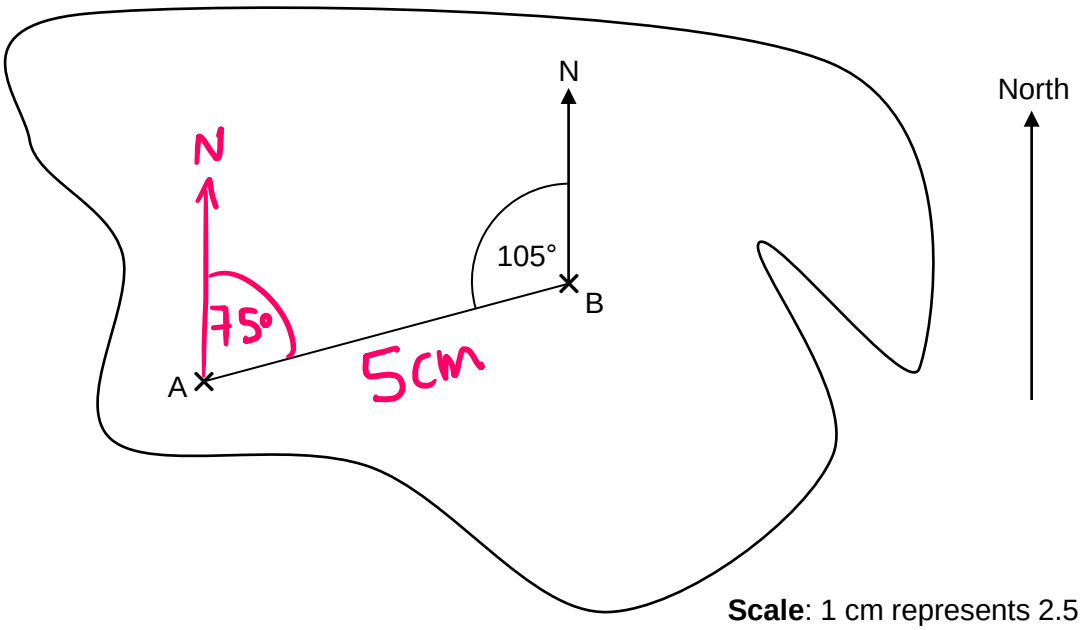
5 (c) Work out the actual distance between town B and town C. **[2 marks]**
Give your answer in kilometres.

4 x 3 = 12

Answer 12 km

9

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



Scale: 1 cm represents 2.5 km

6 (a) Elijah says that the bearing of town A from town B is 105°
Explain why Elijah is incorrect. **[1 mark]**

bearings are measured clockwise

6 (b) Write down the bearing of town B from town A. **[1 mark]**

Answer 075 °

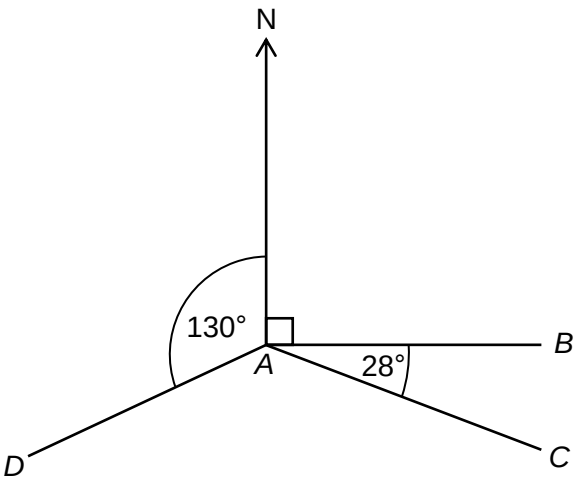
6 (c) Work out the actual distance between town A and town B. **[2 marks]**
Give your answer in kilometres.

5 × 2·5 = 12·5

Answer 12·5 km

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

7 (a) Write down the bearing of *B* from *A* **[1 mark]**

Answer 090 °

7 (b) Work out the bearing of *C* from *A* **[2 marks]**

90 + 28

Answer 118 °

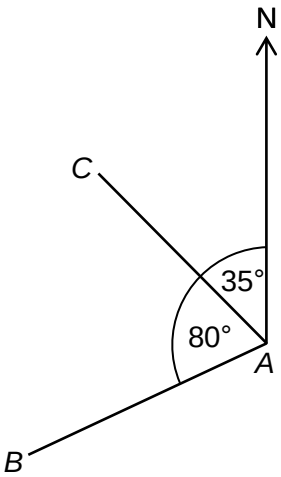
7 (c) Work out the bearing of *D* from *A* **[2 marks]**

360 − 130

Answer 230 °

9

8 *A*, *B*, and *C* are three points.



Not drawn accurately

8 (a) Write down the bearing of *C* from *A* **[1 mark]**

360 - 35

Answer 325 °

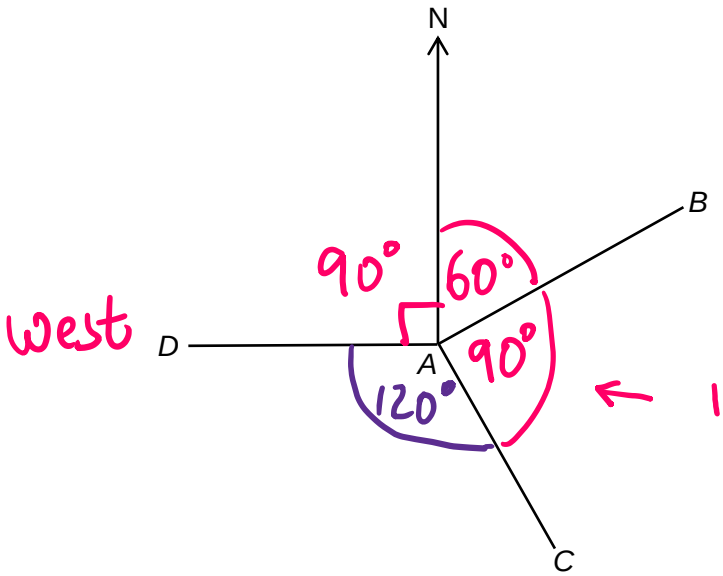
8 (b) Work out the bearing of *B* from *A* **[2 marks]**

80 + 35 = 115

360 − 115 = 245

Answer 245 °

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.

[4 marks]

$90 + 60 + 90 = 240°$

$360 - 240 = 120°$

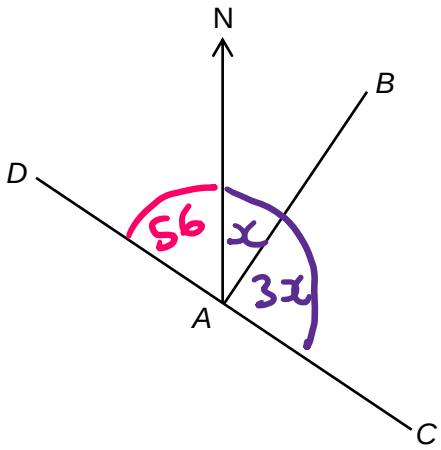
$\div 30$ ($120 : 90$) $\div 30$

$4 : 3$

Answer 4 : 3

7

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* **[4 marks]**

$360 - 304 = 56$

$180 - 56 = 124$

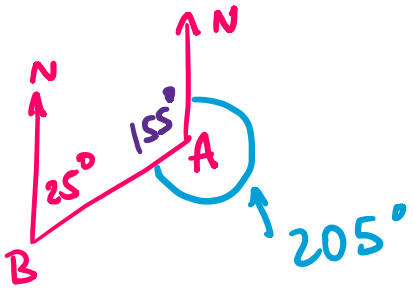
$4x = 124$ (÷4)

$x = 31$

Answer 031 °

11 The bearing of *A* from *B* is 025°

Work out the bearing of *B* from *A*. **[2 marks]**



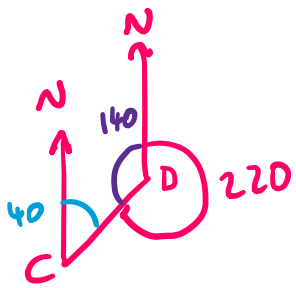
180 - 25 = 155

360 - 155 = 205

Answer 205 °

12 The bearing of *C* from *D* is 220°

Work out the bearing of *D* from *C*. **[2 marks]**



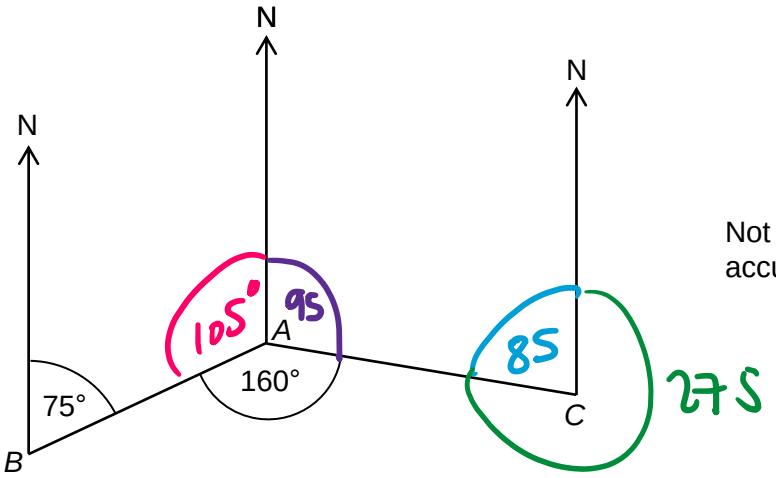
360 - 220 = 140

180 - 140 = 40

Answer 040 °

8

13 *A*, *B*, and *C* are three points.



Not drawn accurately

Work out the bearing of *A* from *C* **[4 marks]**

180 - 75 = 105

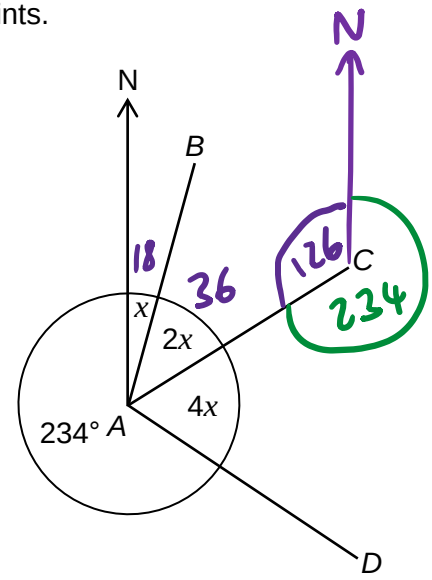
360 - 105 - 160 = 95

180 - 95 = 85

360 - 85 = 275

Answer 275 °

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



Not drawn accurately

Work out the bearing of *A* from *C* **[5 marks]**

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

$7x + 234 = 360$

$7x = 126$

$x = 18$

$180 - 18 - 36 = 126$

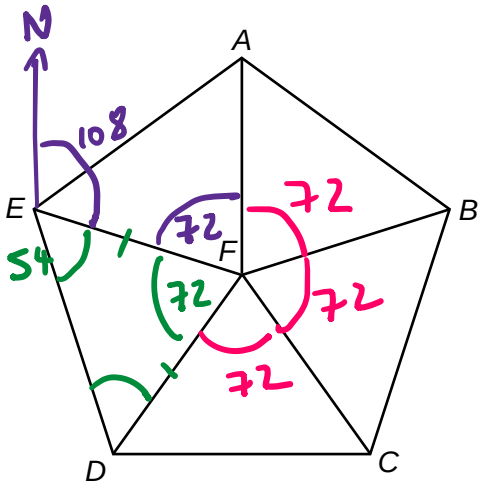
$360 - 126 = 234$

Answer 234 °

9

Turn over ►

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



15 (a) Work out the bearing of *D* from *F* **[2 marks]**

360 ÷ 5 = 72

72 x 3 = 216

Answer 216 °

15 (b) Work out the bearing of *F* from *E* **[2 marks]**

180 - 72

Answer 108 °

15 (c) Work out the bearing of *D* from *E* **[2 marks]**

180 - 72 = 108

108 ÷ 2 = 54 108 + 54 = 162

Answer 162 °

6