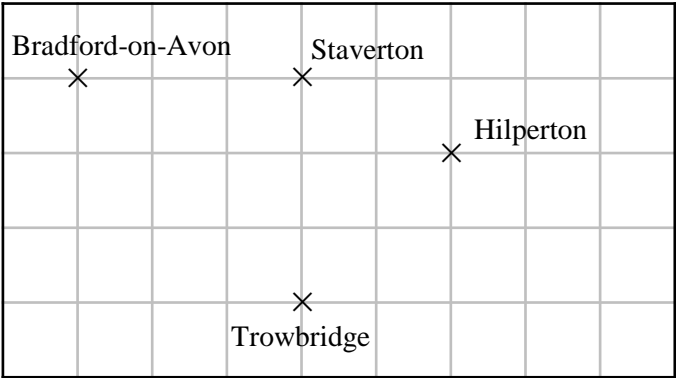




Bearings

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)

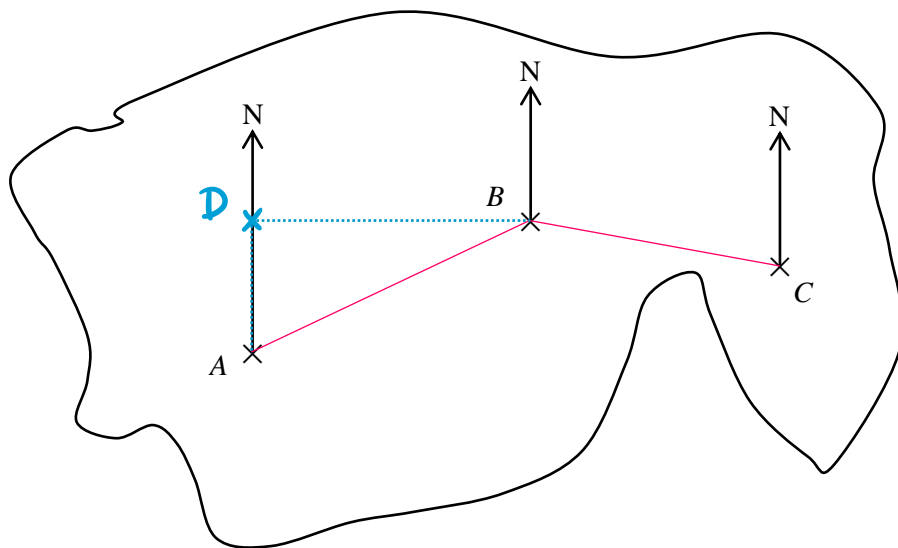
(d) Write down the bearing of Trowbridge from Bradford-on-Avon

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

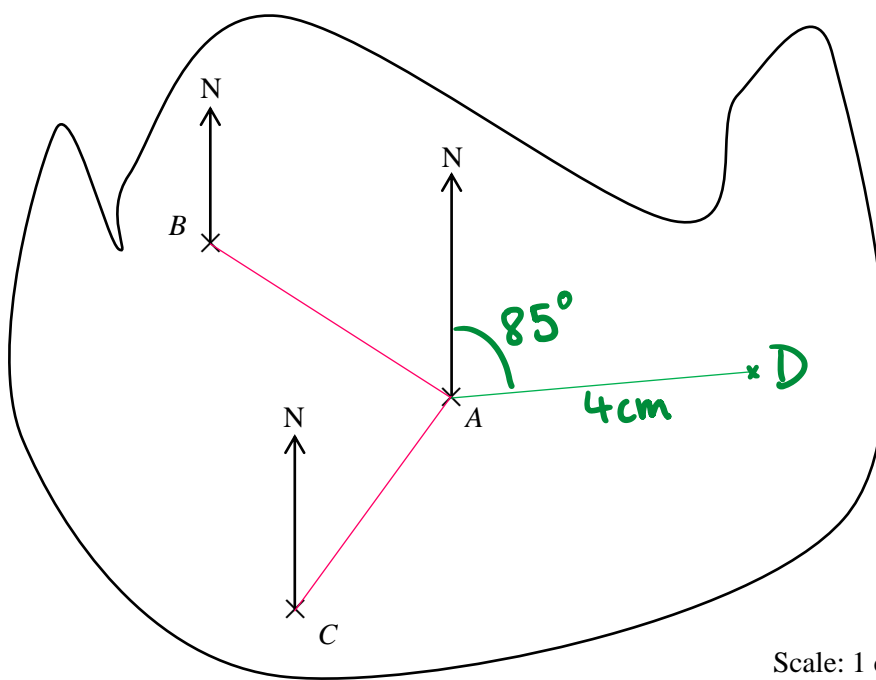
Mark town D onto the map.

(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°

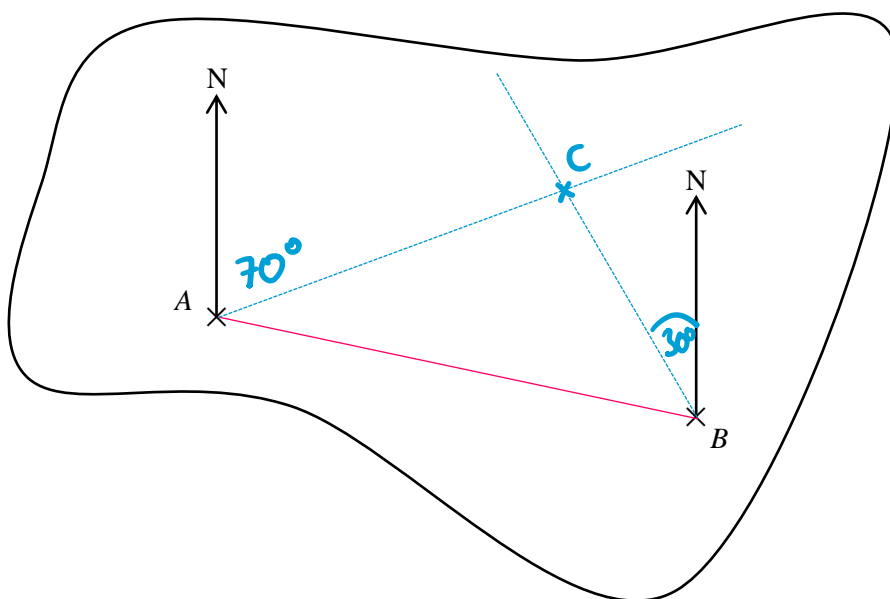
Mark town D onto the map.

1 cm : 5 km
 4 cm : 20 km
 (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°

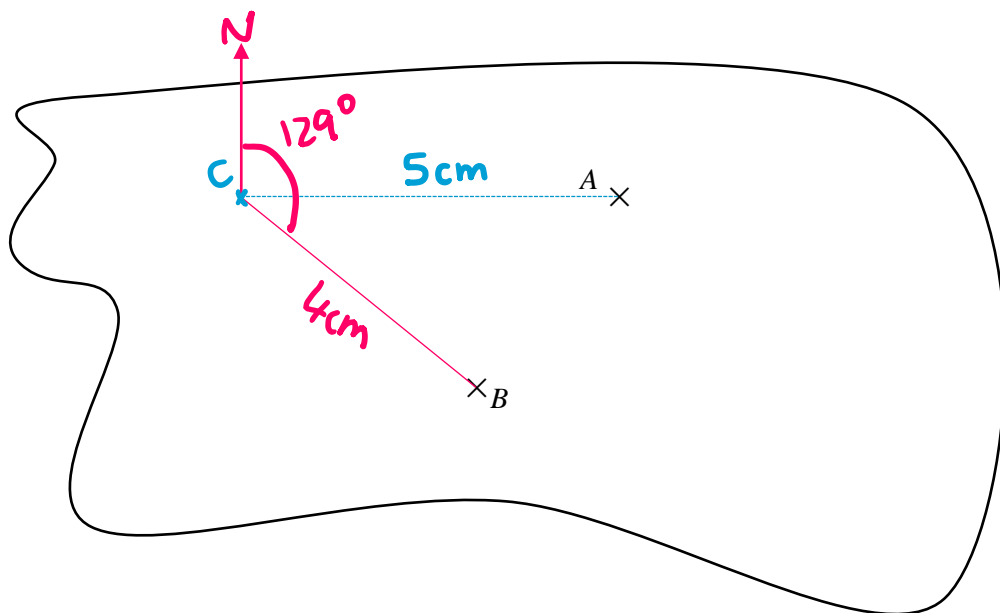
Mark town C onto the map.

(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.

$$\begin{array}{l}
 1\text{cm} : 3\text{km} \\
 5\text{cm} : 15\text{km}
 \end{array}
 \quad \downarrow \times 5 \quad (2)$$

(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.

$$4 \times 3 = 12$$

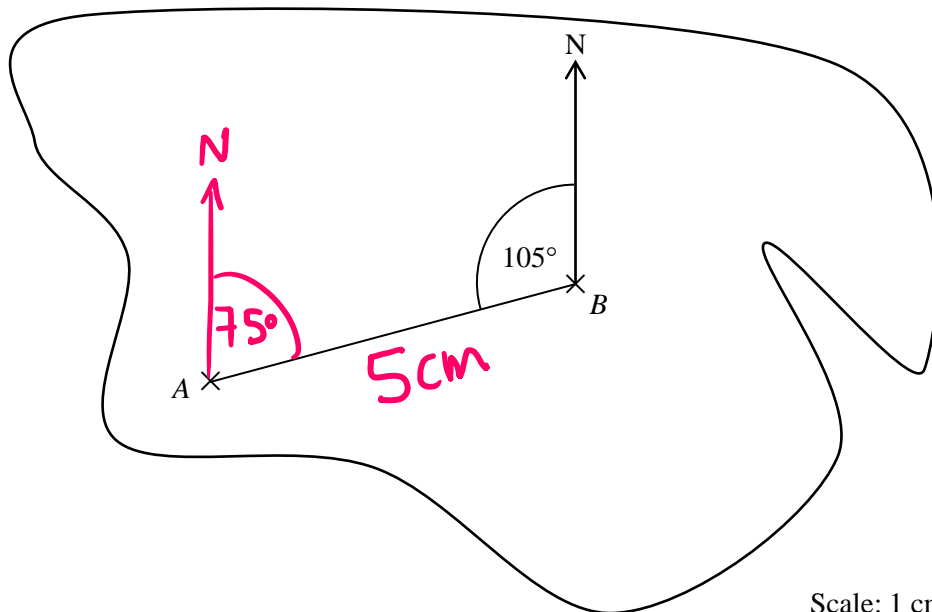
..... 12 km
 (2)

(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

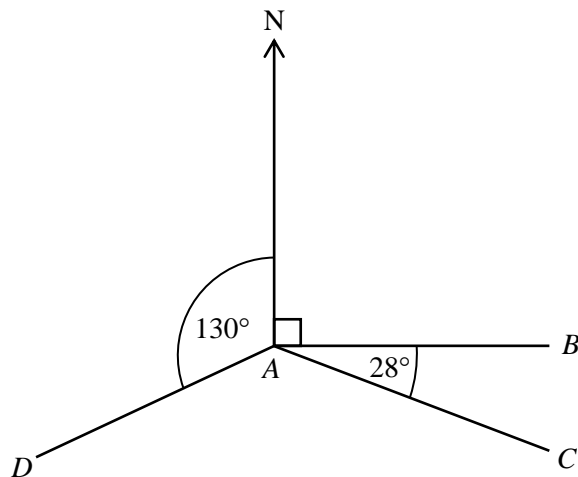
(2)

(Total for Question 6 is 4 marks)





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)

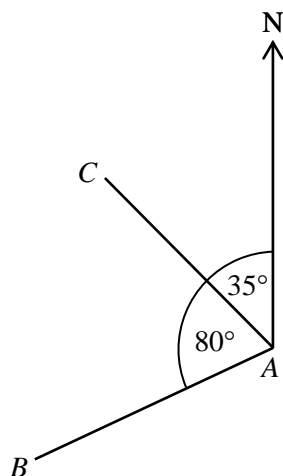
(c) Find the bearing of D from A .

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 .

$$360 - 35$$

$$\begin{array}{r} 325 \\ \hline \end{array} \quad \circ$$

(1)

(b) Find the bearing of B from A .

$$80 + 35 = 115$$

$$360 - 115 = 245$$

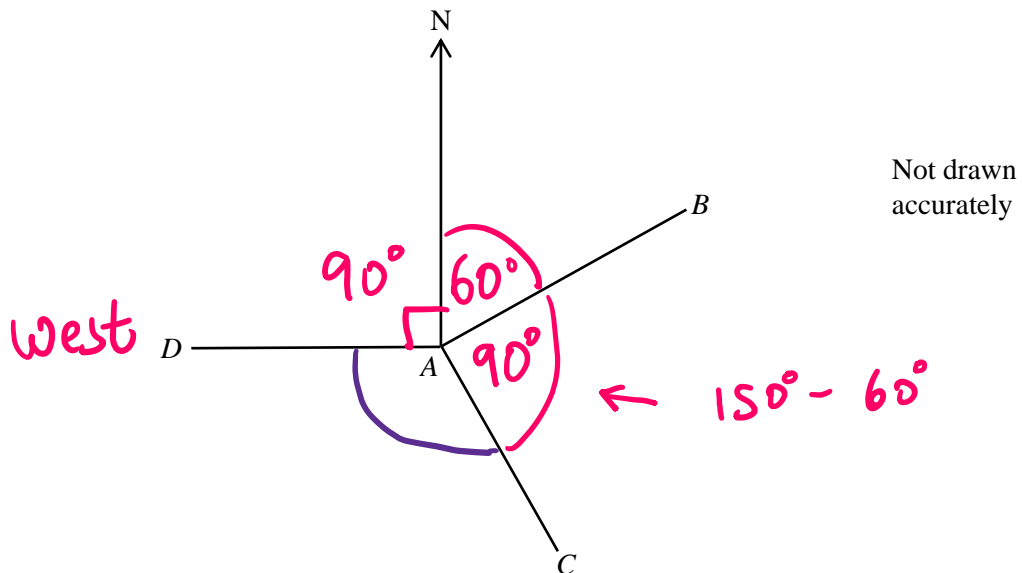
$$\begin{array}{r} 245 \\ \hline \end{array} \quad \circ$$

(2)

(Total for Question 8 is 3 marks)



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



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.

$$90 + 60 + 90 = 240^\circ$$

$$360 - 240 = 120^\circ$$

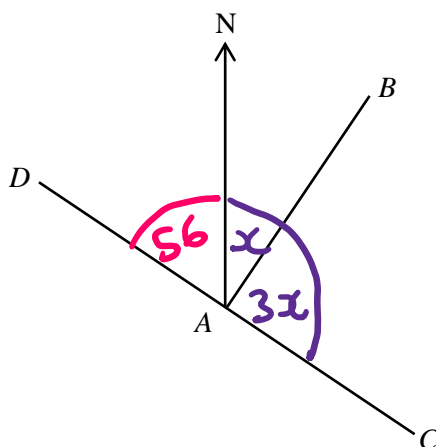
$$\div 30 \left(\begin{array}{c} 120 : 90 \\ 4 : 3 \end{array} \right) \div 30$$

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 $A = 304^\circ$

The bearing of C from $A = 4 \times$ the bearing of B from A .

Work out the bearing of B from A

$$360 - 304 = 56$$

$$180 - 56 = 124$$

$$\begin{array}{l} \div 4 \quad \left\{ \begin{array}{l} 4x = 124 \\ x = 31 \end{array} \right. \quad \div 4 \end{array}$$

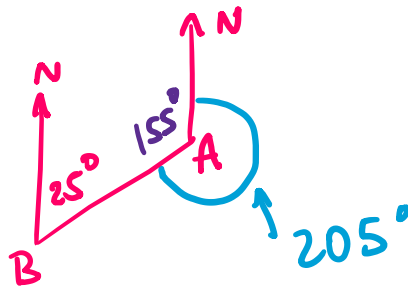
031

(Total for Question 10 is 4 marks)



11 The bearing of A from B is 025°

Work out the bearing of B from A .



$$180 - 25 = 155$$

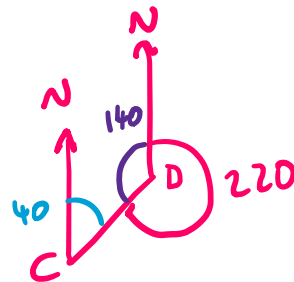
$$360 - 155 = 205$$

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 .



$$360 - 220 = 140$$

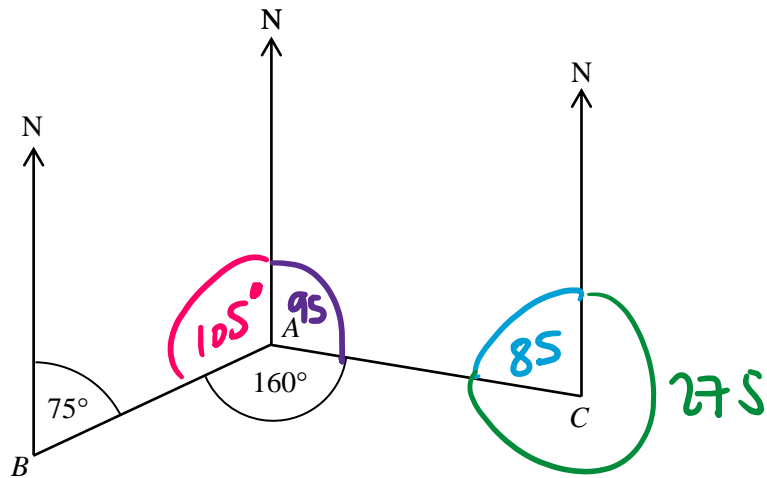
$$180 - 140 = 40$$

040

(Total for Question 12 is 2 marks)



13 A, B, and C are three points.



Work out the bearing of A from C.

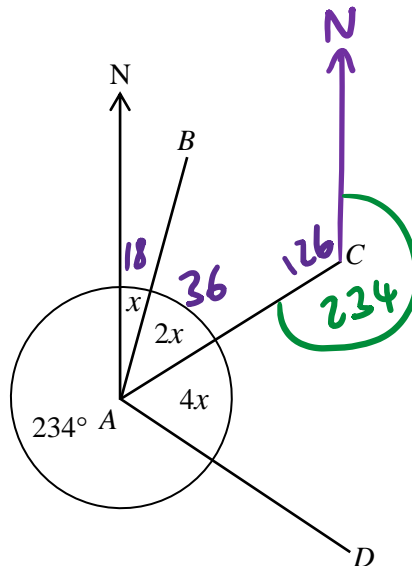
$$\begin{aligned}
 180 - 75 &= 105 \\
 360 - 105 - 160 &= 95 \\
 180 - 95 &= 85 \\
 360 - 85 &= 275
 \end{aligned}$$

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.

$$\begin{aligned}
 x + 2x + 4x + 234 &= 360 \\
 7x + 234 &= 360 \\
 7x &= 126 \\
 x &= 18
 \end{aligned}$$

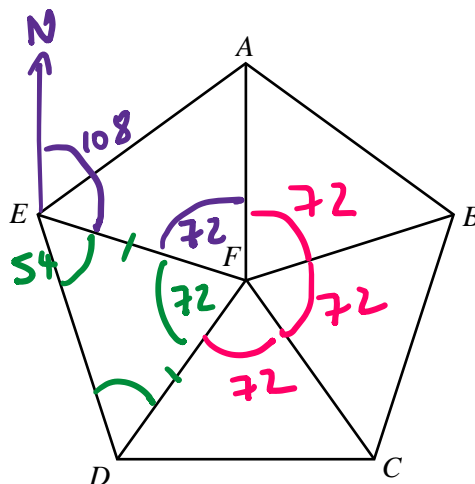
$$\begin{aligned}
 180 - 18 - 36 &= 126 \\
 360 - 126 &= 234
 \end{aligned}$$

234

(Total for Question 14 is 5 marks)



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



(a) Find the bearing of D from F .

$$360 \div 5 = 72$$

$$72 \times 3 = 216$$

216

(2)

(b) Find the bearing of F from E .

$$180 - 72$$

108

(2)

(c) Find the bearing of D from F .

$$180 - 72 = 108$$

$$108 \div 2 = 54$$

$$108 + 54 = 162$$

162

(2)

(Total for Question 15 is 6 marks)

