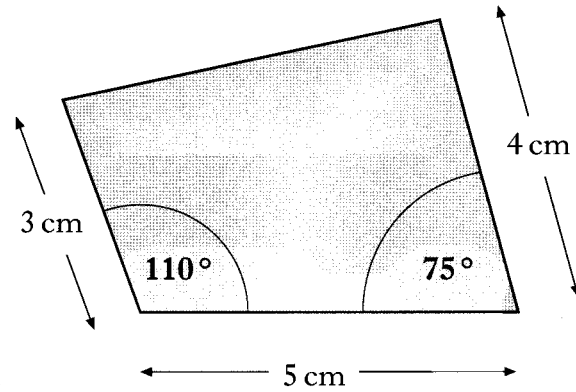


2008 P2 Q7

A piece of glass from a stained glass window is shown below.



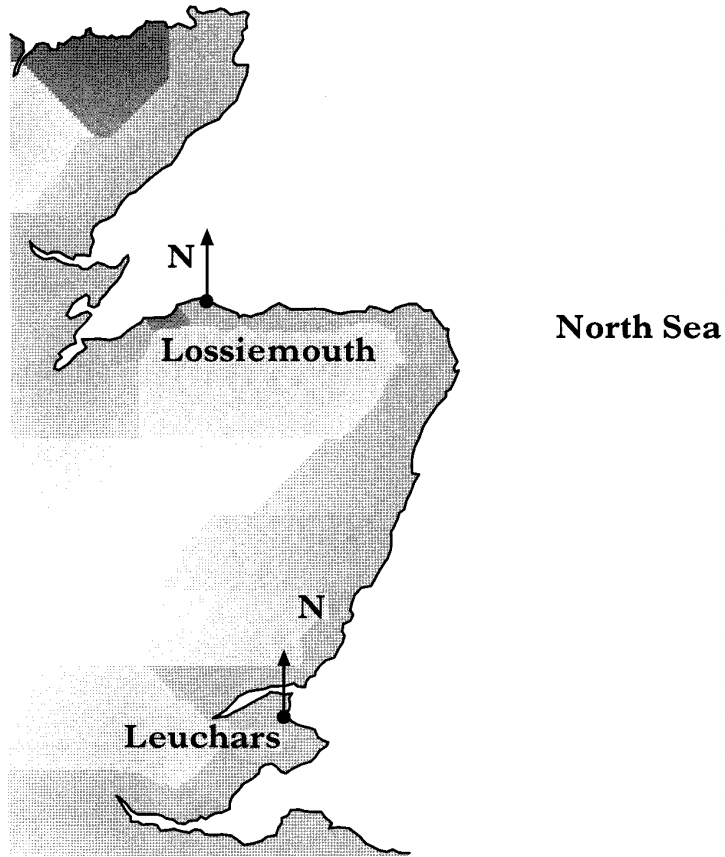
A larger piece of glass, the same shape, is to be made using a scale of 2:1.

Make an accurate drawing of the larger piece of glass.

3

Ans

The diagram below shows the positions of Lossiemouth and Leuchars.
 A ship in the North Sea is on a bearing of 110° from Lossiemouth and 075° from Leuchars.
 Show the position of the ship on the diagram below.

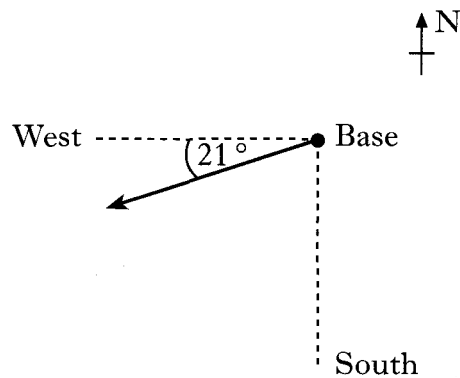


2006 P2 Q11

3

Ans

Bruce sets out from base during an orienteering competition.
 The arrow in the sketch below shows the direction in which he is travelling.



2003 P1 Q2

What is the three-figure bearing of this direction?

2

Ans 249°

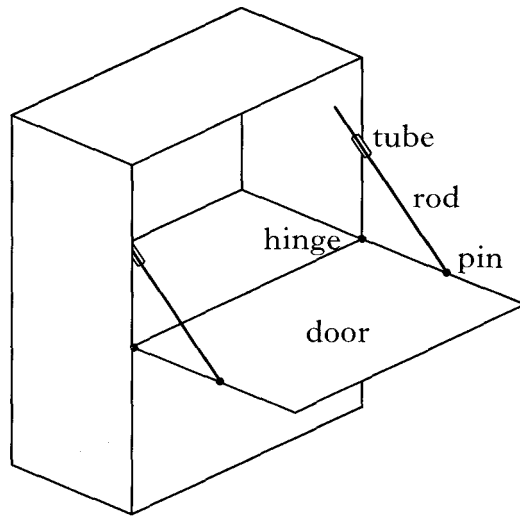


Diagram 1

A cabinet has a door that opens downwards until it is at right angles to the front of the cabinet.

A rod is pinned to the door at point P, 15 centimetres from the hinge, H.

The rod is 35 centimetres long and passes through a tube, at point T.

This tube is 20 centimetres vertically above the hinge.

- (a) Diagram 2 shows the positions of points P, T and H when the door is fully open.

Draw this diagram to a scale of 1:2.

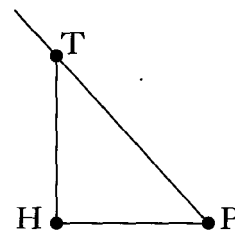


Diagram 2

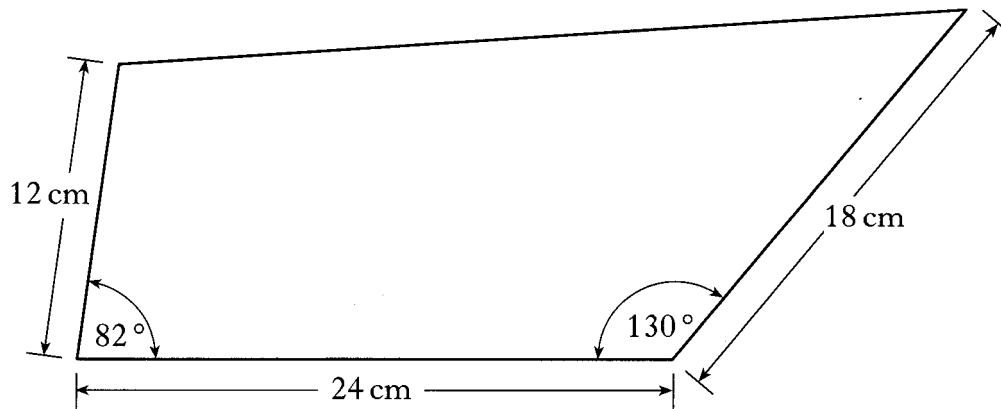
- (b) Use your scale drawing to find the actual length of the rod between points P and T.

4

2

Ans (b) 25 cm

A sketch of a steel panel for a piece of machinery is shown below.



- (a) Using a scale of 1:3, make a scale drawing of the steel panel.
- (b) Use your scale drawing to find the **actual** length of the fourth side of the steel panel.

3

2

Ans (b) 33.9 cm