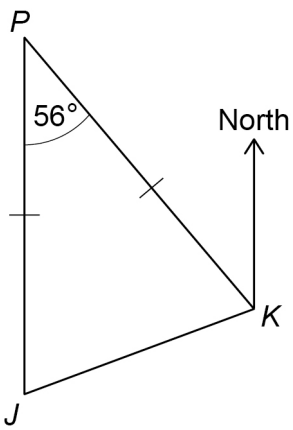
1 *J* and *K* are ships.

P is a port.

J is due South of *P*.

Angle *JPK* = 56°

JP = *KP*



Not drawn accurately

Work out the bearing of *J* from *K*.

[3 marks]

Answer _____ °

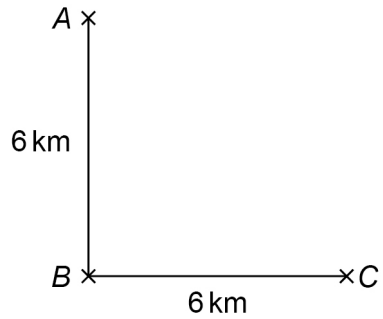
2 (a) *B* is

6 km due South of *A*

and

6 km due West of *C*.

Not drawn accurately

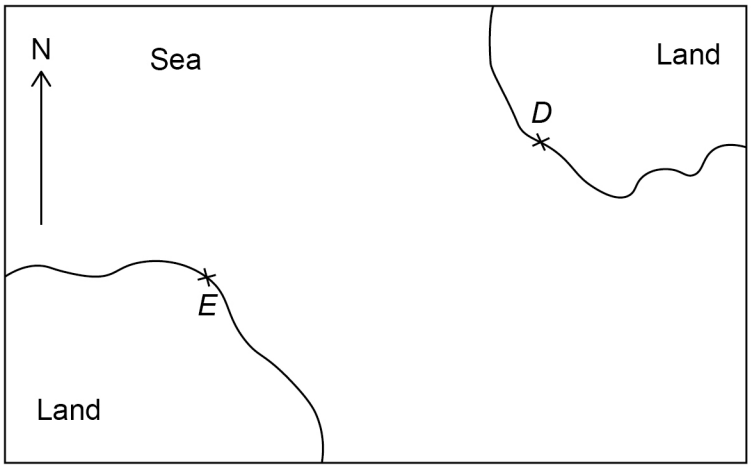


Work out the bearing of *A* from *C*.

[2 marks]

Answer _____ °

2 (b) Here is a scale drawing.



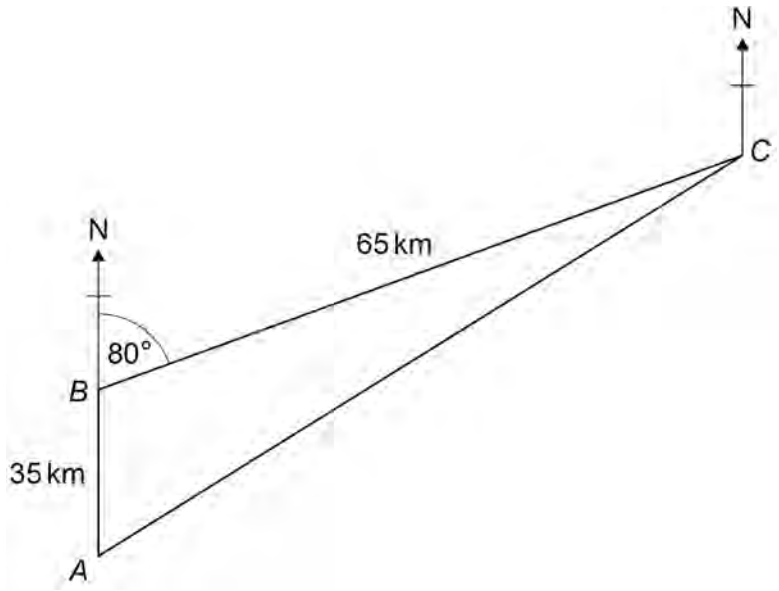
A ship is going to sail from *D* to *E*.

Mia works out that the ship needs to sail on a bearing of 068°

Why must Mia be wrong?

[1 mark]

3



Not drawn accurately

A boat sails 35 km North from *A* to *B*.

From *B* the boat sails to *C* and then back to *A*.

3 (a) Show that the distance the boat sails from *C* to *A* is 79 km to the nearest km

You **must** show your working.

[2 marks]

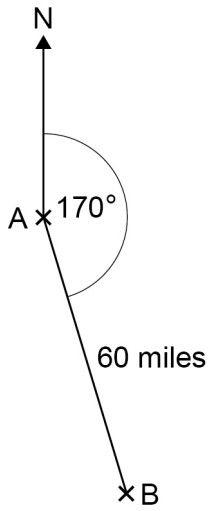
3 (b) Work out the bearing of *A* from *C*.

[4 marks]

Answer _____ °

4 B is 60 miles from A on a bearing of 170°

Not drawn accurately



A ship sails from A on a bearing of 247°

It travels at a constant speed of 23 mph for $1\frac{1}{2}$ hours.

Is the ship now closer to B than it was when it left A?

You **must** show your working.

[5 marks]