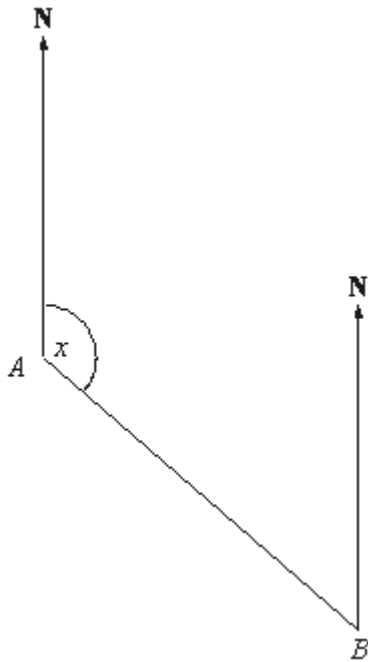


- Q1.** The diagram shows the position of two airports, *A* and *B*.
A plane flies from airport *A* to airport *B*.



Scale: 1 cm represents 50 km

- (a) Measure the size of the angle marked *x*.

..... °

(1)

- (b) Work out the real distance between airport *A* and airport *B*.
Use the scale 1 cm represents 50 km.

..... km

(2)

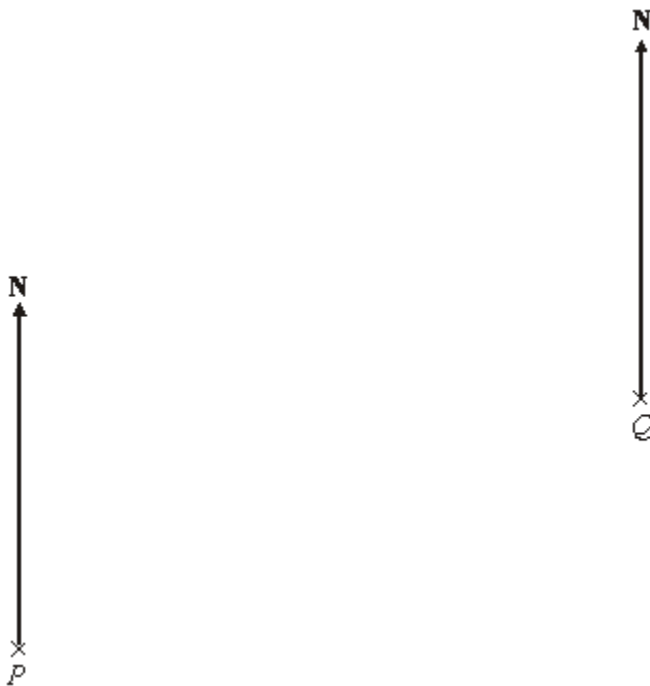
Airport *C* is 350 km on a bearing of 060° from airport *B*.

- (c) On the diagram, mark airport *C* with a cross (×).

Label it *C*.

(2)
(Total 5 marks)

Q2. The diagram shows the position of two boats, *P* and *Q*.



The bearing of a boat *R* from boat *P* is 060°

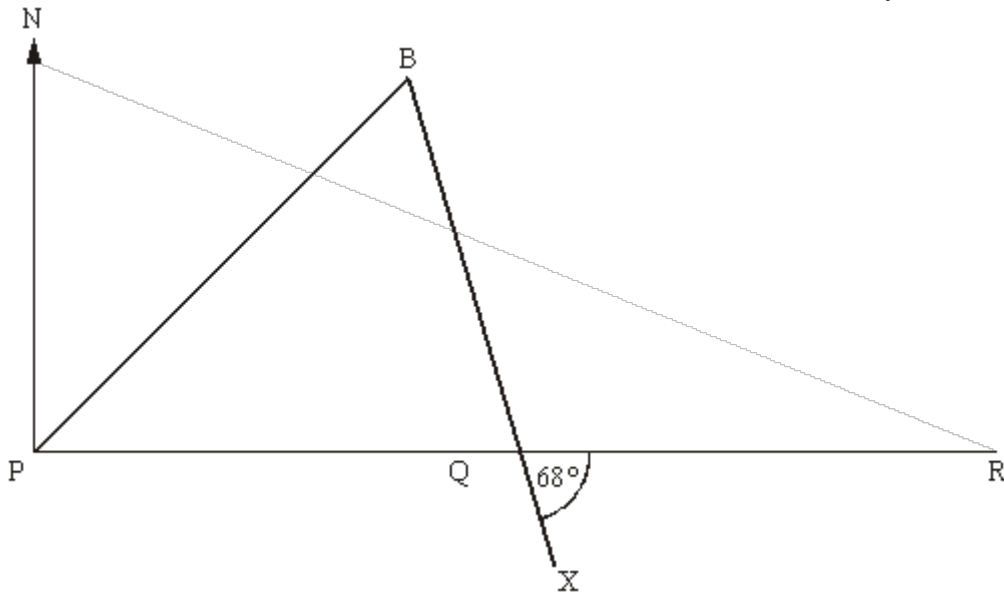
The bearing of boat *R* from boat *Q* is 310°

In the space above, draw an accurate diagram to show the position of boat *R*.
Mark the position of boat *R* with a cross (X). Label it *R*.

(Total 3 marks)

Q3.

Diagram **NOT**
accurately drawn

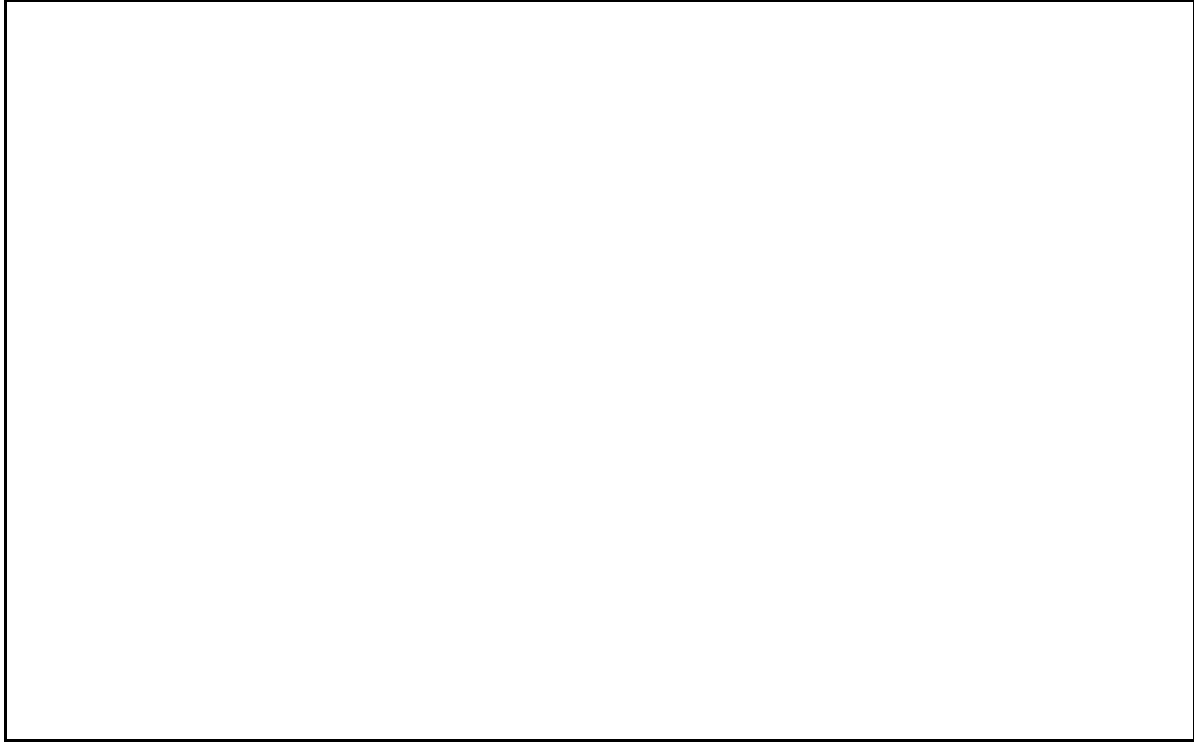


PQR is a straight line going East.

B is on a bearing, 052° from P .

B and Q are the same distance from P .

Find the bearing of X from B .
You must show your working out clearly.



.....°

(Total 3 marks)

M1.

	Working	Answer	Mark	Additional Guidance
(a)		129 – 133	1	B1 for 129 – 133
(b)	6×50	290 – 310	2	B2 for 290 – 310 (B1 for 6 ± 0.2 (cm) seen or for $d \times 50$ with $3 \leq d \leq 9$)
(c)		Point C marked	2	B1 for $BC = 7 \pm 0.2$ cm B1 for bearing = $60 \pm 2^\circ$
Total for Question: 5 marks				

M2.

Answer	Mark	Additional Guidance
diagram	3	M1 for line drawn or point marked within guidelines from P M1 for line drawn or point marked within guidelines from Q up to top guideline from P A1 for point indicated within region where guidelines intersect
Total for Question: 3 marks		

M3.

Working	Answer	Mark	Additional Guidance
	154°	3	B1 for 38° B1 for 64° B1 cao
Total for Question: 3 marks			

- E1.** In part (a) almost two thirds of candidates measured the size of the angle correctly. Many of the incorrect answers were less than 90° , suggesting that candidates had read from the wrong scale on the protractor. Part (b) was well answered with more than three quarters of candidates gaining both marks. Some of those who didn't gained one mark for showing the length AB to be 6 cm or for multiplying their length by 50. Quite a common incorrect response was 350, often with no working which meant that no mark could be awarded. Part (c) was poorly answered. Many candidates managed to mark a point 7 cm from B but relatively few managed to position it on a bearing of 060° . It was often positioned on a bearing of 030° as a result of the protractor being placed with the 90° line on the north line.
- E2.** Weaker candidates could draw the 60° bearing but not 310° . A number used their protractor with the straight edge horizontal, effectively measuring bearings from an East-West line. Some candidates marked points correctly but then joined the two points up, thus losing the third mark. In some cases, the mid-point of this line was identified and labelled R.