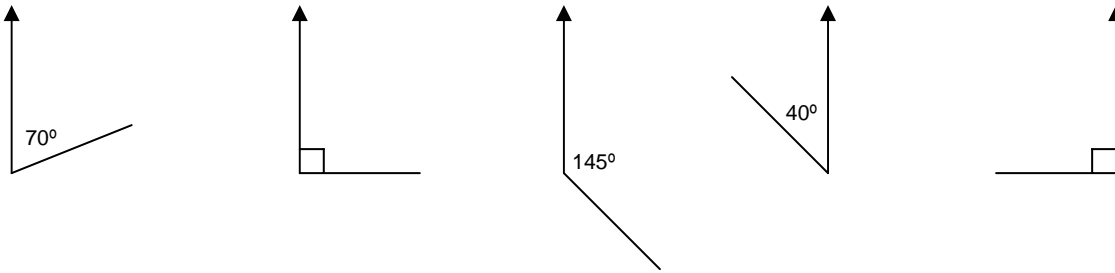




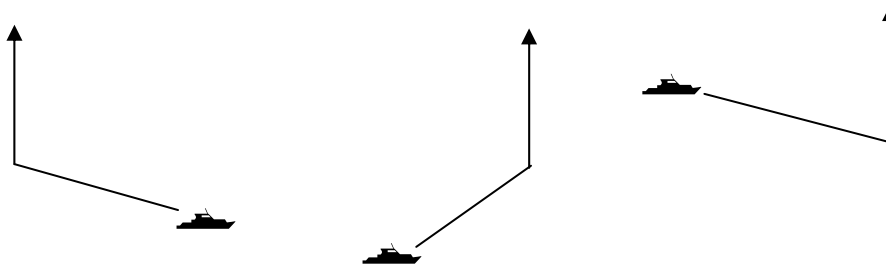
1 For each diagram write down the three figure bearing represented.



2 Draw an accurate diagram for each of the following bearings.

- (i) An aircraft flying on a bearing of 075° .
- (ii) A submarine travelling on a bearing of 150° .
- (iii) A rocket travelling on a bearing of 200° .
- (iv) A car travelling on a bearing of 048° .
- (v) A helicopter flying on a bearing of 310° .

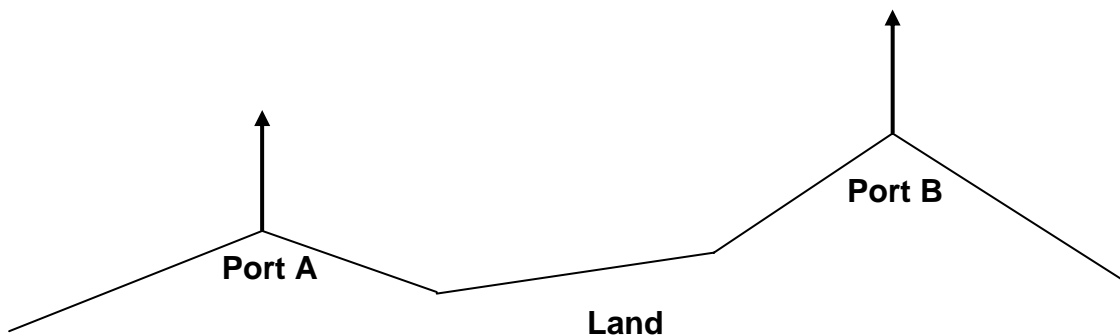
3 Use a protractor to measure accurately the bearings the ships are travelling on.



4 Sketch each bearing roughly and then use a protractor to measure how accurate your initial guess was. Each time write down how many degrees out your sketch was.

- (i) 50° (ii) 260° (iii) 130° (iv) 335° (v) 212°

5 A ship (S) is located on a bearing of 065° from Port A and a bearing of 285° from Port B. Copy the diagram below and use the bearings to mark accurately the position of the ship (S).



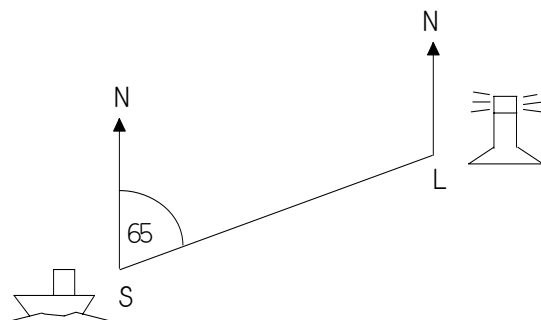
6 For each of the following questions draw accurate diagrams, use a scale of 1 cm = 1 km.

- (i) A person walks on a bearing of 120° for 5 km. They then walk on a bearing of 040° for 3 km. How far, in a straight line, is the person from their starting point?
- (ii) Runners in a cross country race run on a bearing of 055° for 4 km. The runners then change direction and then run the next 6 km on a bearing of 100° . How far, in a straight line, are the runners from the starting point?
- (iii) A car travels on a bearing of 200° for 5 km, and then on a bearing of 300° for another 5 km. How far, in a straight line, is the car from its starting point?
- (iv) A yacht sails from a port on a bearing of 085° for 10 km, and then on a bearing of 240° for 6 km. How far, in a straight line, is the yacht from the port?

For this next group of questions use a scale of 1 cm = 10 km.

- (v) An aeroplane leaves an airport on a bearing of 150° and flies for 65 km. It then flies on a bearing of 035° for 40 km. How far, in a straight line, is the aeroplane from the airport.
- (vi) A military ship travels on a bearing of 300° for 50 km. It then travels on a bearing of 240° for 35 km. How far, in a straight line, is the ship from its starting point.
- (vii) A helicopter sets off from base on a bearing of 090° for 30 km. It then changes direction and flies for 50 km on a bearing of 200° . On what bearing and how far should the helicopter fly to return to its base?
- (viii) A submarine leaves a port on a bearing of 220° for 80 km. It then travels on a bearing of 100° for 60 km. On what bearing and how far should the submarine travel to return to its port?

7 The diagram below shows the position of a ship (S) from a lighthouse (L). The diagram is not drawn accurately.



- (i) What is the bearing of the lighthouse from the ship?
- (ii) What is the bearing of the ship from the lighthouse?

8 A helicopter takes off and flies on a bearing of 075° for 45 km. It then flies on a bearing of 080° for 60 km, after which, the helicopter flies on a bearing of 300° for 70 km.

- (i) Using a scale of 1 cm = 10 km draw an accurate scale drawing of the helicopter's journey.
- (ii) What distance did the helicopter travel?
- (iii) At the end of its journey how far is the helicopter from the start.