

Find the bearings listed below:

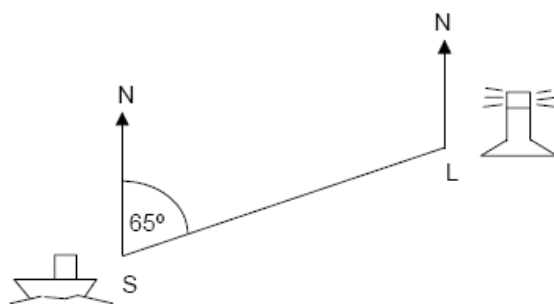
1. The bearing from the post office to the shop.
2. The bearing from the fish and chip shop to the church.
3. The bearing from the school to the shop.
4. The bearing from the shop to the post office.
5. The bearing from the church to the shop.
6. The bearing from the fish and chip shop to the post office.

The map is drawn to scale so that 1 cm on the map is the same as 1 km in real-life.

Find the real-life distances listed below:

1. The distance from the post office to the fish and chip shop.
2. The distance from the school to the post office.
3. The distance from the shop to the church.
4. The distance from the church to the post office.

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

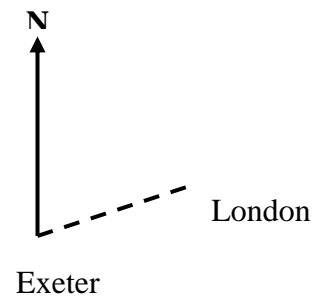


- i) What is the bearing of the lighthouse from the ship?
- ii) What is the bearing of the ship from the lighthouse?

2) On four separate occasions, a plane flies from Exeter Airport to different destinations. The bearings and distances of these destinations from Exeter are given in the table.

| Destination | Bearing | Distance |
|-------------|---------|----------|
| London      | 077°    | 250km    |
| Glasgow     | 356°    | 550km    |
| Leeds       | 036°    | 400km    |
| Guernsey    | 162°    | 150km    |

Copy and complete the diagram to show the bearing and distance of each destination from Exeter. Use a scale of 1cm = 50km



3) A hot air balloon takes off and travels for 5km in a NW direction. Wind then blows the balloon 6km in a bearing of 300° before landing.

- i) Draw an accurate diagram of the balloon's journey, using 1cm = 1km.
- ii) How far has the balloon landed from its starting point?

4) A man starts walking for 700m on a bearing of 030° to point A. He then changes direction and walks on a bearing of 315° until he is exactly north of his starting point.

- i) Draw an accurate drawing of his journey using a scale of 1cm = 100m.
- ii) How far does he have to walk on a bearing of 315°?
- iii) How far away is he from his starting point?

5) A ship sails on a bearing of  $100^\circ$  for 10km. It then sails on a bearing of  $310^\circ$  for 7km.

i) Using a scale of  $1\text{cm} = 1\text{km}$ , draw an accurate scale drawing of the ships journey.

ii) Measure how far the ship is away from its starting point when it has finished its journey.



6) A ship (S) is located on a bearing of  $065^\circ$  from Port A and on a bearing of  $310^\circ$  from Port B. Copy the diagram and accurately mark the position of the ship.

