## Bearings

1 Bearings are always measured from North.
2 Two North lines are considered to be parallel.
3 Bearings are 3 digit numbers so $47^{\circ}$ is $047^{\circ}$.
4 Bearings are measured in degrees, minutes and seconds.
5 There are 60 minutes in one degree.
6 There are 60 seconds in one minute.

Q1 Use a protractor and a ruler to measure the bearing of each line and the length of each line to the nearest mm .


Q2 A flight flies from Leeds to Munich. The path of the flight is shown below.


Q3 A boat is out at sea at point $O$. The boat is heading for port at $P$. The navigator plots a course of $034^{\circ}$ for five miles and then $070^{\circ}$ for eight miles.

What course should the navigator plot to return straight to his original position?

How far is the journey?
Draw a scale diagram with a scale of $1 \mathrm{~cm}=1$ mile and measure the bearing

The diagram to the left is there to show you what is meant by the question. It is not drawn to scale.

## Answers

Q1 $A \rightarrow B \quad 135^{\circ} \quad 49.5 \mathrm{~mm}$
$C \rightarrow D \quad 102^{\circ} 61 \mathrm{~mm}$
$J \rightarrow K \quad 339^{\circ} \quad 42 \mathrm{~mm}$
$E \rightarrow F \quad 192^{\circ} 40 \mathrm{~mm}$
$\mathrm{G} \rightarrow \mathrm{H} \quad 282^{\circ} \quad 44 \mathrm{~mm}$
Q2 Leeds $\rightarrow$ Munich $135^{\circ}$
Munich $\rightarrow$ Leeds $315^{\circ}$
Distance 740km
Q3 $236^{\circ}$ for 12.4 miles

