# Scale Drawings with Bearings

**1**

The scale of a map is 1 cm to 3 km. (a) A road is 4 cm long on the map. How long is it in real life? (b) A lake is 7.5 km long. How long is it on the map?

(a) $4 \times 3 =$ ☐ km

(b) $7.5 \div 3 =$ ☐ cm

**2**

The scale of a map is 1 cm to 5 km. (a) Two villages are 6.5 cm apart on the map. How far apart are they in real life? (b) A canal is 40 km long. How long is it on the map?

(a)

(b)

**3**

A boat sails 20 km from P on a bearing of 060°. The scale is 1 cm to 5 km. Work out the length of the line, then draw it.




$20 \div 5 =$ ☐ cm

**4**

A plane flies 18 km from P on a bearing of 135°. The scale is 1 cm to 6 km. Draw its route.




Length

# Scale Drawings with Bearings

**5**

A ship sails 16 km from P on a bearing of 300°. The scale is 1 cm to 4 km. Draw its route.




Length

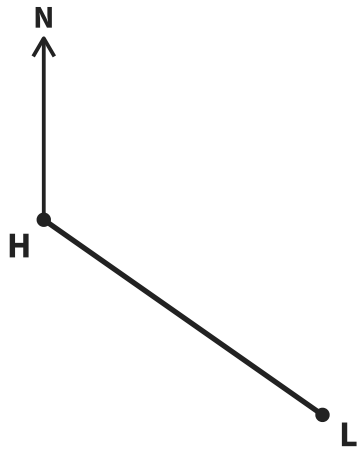
_____

Angle anticlockwise from North

_____

**6**

On this map the scale is 1 cm to 2 km, and HL is 4.5 cm. Measure the bearing of L from H. How far is L from H in real life?




Bearing

_____

Distance

_____

**7**

A walker goes 8 km from A on a bearing of 090° to B, then 6 km on 000° to C. The scale is 1 cm to 2 km. Draw the route. How far is C from A?




AB and BC

_____

AC

_____

**8**

A map has a scale of 1 cm to 4 km. A road is 6 cm long on the map. Ella says the road is 1.5 km long. Explain her mistake, then find the real length.

Ella's mistake

_____

Length

_____

# Scale Drawings with Bearings *further practice*

**9**

A drone flies 21 km from P on a bearing of 240°. The scale is 1 cm to 7 km. Draw its route.




Length

Angle anticlockwise from North

**10**

A map has a scale of 2 cm to 5 km. Two towns are 6 cm apart on the map. How far apart are they in real life?

Working

Distance

**11**

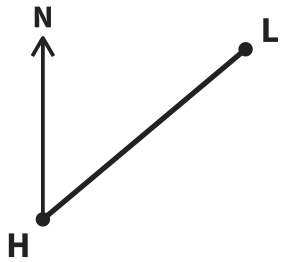
On a map, a line 4 cm long stands for 32 km. Complete the scale: 1 cm to ___ km.

Working

Scale

**12**

On this map the scale is 1 cm to 20 km, and HL is 3.5 cm.
Measure the bearing of L from H. Find the real distance, and the bearing of H from L.




L from H

Distance; H from L

# Scale Drawings with Bearings *further practice*

**13**

A boat sails 10 km from P on a bearing of 060° to Q, then 10 km on 180° to R. The scale is 1 cm to 4 km. Draw the route. How far is R from P?




PQ and QR

PR

**14**

A 30 km road is drawn on map A, at 1 cm to 4 km, and on map B, at 1 cm to 6 km. On which map is the road longer, and by how much?

Lengths

Answer

**15**

A race goes 8 km from S on 090° to T, then 6 km on 180° to U, then straight back to S. The scale is 1 cm to 2.5 km. Draw it. How long is the race?




ST and TU

US

Total

**16**

To draw a bearing of 210°, Ali measures 30° anticlockwise from North. Explain his mistake. What angle should he measure?

Ali's mistake

Angle