

Scale drawings

Starter

1. (Review of last lesson) A ship sails on a course of 202° . It returns on the same route. What is its bearing on the return?

Notes

Bearings are often used in scale drawings.

Choose a suitable scale *before* starting the drawing so that you have enough space to do the questions. Make sure the *scale* is *clearly labelled* on your *diagram*.

Your answers to scale drawing questions may differ slightly from the actual answer.

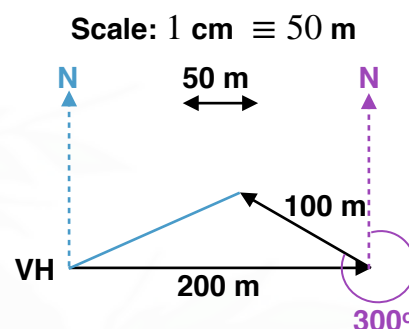
- E.g. 1** Bridget begins at the village hall. She walks due East for 200 m, then on a bearing of 300° for 100 m. What is Bridget's distance and bearing from the village hall? Draw a scale diagram to find the answer. (Use a scale of 1 cm to 50 m)

Working:

Return journey — the **line** is about 2.5 cm long.
So Bridget is about $2.5 \times 50 = 125$ m from the village hall.

The bearing is the angle the **blue line** makes with the **blue North line** so about 065° .

Answers: 125 ± 5 m
 $065 \pm 2^\circ$



- E.g. 2** Marie cycles a distance of 8 km from F to G on a bearing of 090° . From G she cycles 6 km to H . The bearing of H from G is 180° . What is Marie's bearing and distance from F ? (Use a scale of 1 cm to 2 km).

- E.g. 3** Michael rows from Ryde for a distance of 800 m on a bearing of 300° , then he rows for 1200 m on a bearing of 060° . What is Michael's distance and bearing from Ryde? (Use a scale of 1 cm to 200 m).

Video: [Scale drawings](#)

[Solutions to Starter and E.g.s](#)

Exercise

p202 Ex 11.4 Qu 1-11

Summary

Choose a suitable scale *before* starting the drawing so that you have enough space to do the questions. Make sure the *scale* is *clearly labelled* on your *diagram*.

[Textbook answers \(only available during a lockdown\)](#)