JRA Tutors
Private tuition and small online Study Pods

Bearings

Grade 4 topic · Foundation and Higher · Edexcel and AQA

How to use this pack
20 questions that get harder as you go. Foundation students: aim for Questions 1–15 (54 marks) and have a go at the rest. Higher students: complete all 20. Show your working on the lines and write your final answer on the answer line, then mark yourself with the answers at the back. Diagrams are not drawn accurately. Total: 79 marks.

Warm-up

1 The bearing of B from A is 260°. Work out the bearing of A from B. **[2 marks]**

Answer _____

2 Write down the bearing of east. **[2 marks]**

Answer _____

3 Write down the bearing of south-west. **[2 marks]**

Answer _____

4 A ship sails on a bearing of 235°. What is the bearing of its reverse journey? **[2 marks]**

Answer _____

5 Write down the bearing of north-west. **[2 marks]**

Answer _____

Core

6 A ship sails 6 km on a bearing of 040°. How far north of its start is it? Give your answer to 3 significant figures. **[4 marks]**

Answer _____

7 A ship sails 31 km on a bearing of 070°. How far east of its start is it? Give your answer to 3 significant figures. **[4 marks]**

Answer _____

8 A ship sails 30 km on a bearing of 060°. How far north of its start is it? Give your answer to 3 significant figures. **[4 marks]**

Answer _____

9 A ship sails 24 km on a bearing of 070°. How far east of its start is it? Give your answer to 3 significant figures. **[4 marks]**

Answer _____

10 A ship sails 26 km on a bearing of 060°. How far north of its start is it? Give your answer to 3 significant figures. **[4 marks]**

Answer _____

Stretch

11 B is 6 km due east of A. C is 8 km due south of B. Work out the distance AC. **[4 marks]**

Answer _____

12 B is 9 km due east of A. C is 12 km due south of B. Work out the bearing of C from A, to the nearest degree. **[5 marks]**

Answer _____

13 B is 9 km due north of A. C is 12 km due east of B. Work out the bearing of C from A, to the nearest degree. **[5 marks]**

Answer _____

14 B is 5 km due north of A. C is 12 km due west of B. Work out the bearing of C from A, to the nearest degree. **[5 marks]**

Answer _____

15 A is 8 km due west of B and C is 15 km due south of B. Work out the bearing of A from C, to the nearest degree. **[5 marks]**

Answer _____

Challenge

16 A ship sails 30 km on a bearing of 040° and then 40 km on a bearing of 130°. Work out how far it is from its starting point. **[5 marks]**

Answer _____

17 A ship sails 30 km on a bearing of 040° and then 40 km on a bearing of 130°. Work out the bearing of the ship from its starting point, to the nearest degree. **[6 marks]**

Answer _____

18 The bearing of B from A is 070°. The bearing of C from A is 140°. AB = 8 km and AC = 8 km. Work out the size of angle BAC and the bearing of C from B. **[5 marks]**

Answer _____

19 A boat leaves H on a bearing of 060° for 12 km to P, then sails 12 km due south to Q. Work out the distance HQ, to 3 significant figures. **[6 marks]**

Answer _____

20 The bearing of Q from P is 125°. Work out the bearing of P from Q. **[3 marks]**

Answer _____