

GCSE Maths: Bearings: measuring, drawing and back bearings (Higher): worksheet

GCSE Maths - Loci, Bearings and Vectors - Higher - Lesson 22.6

Name: _____

Date: _____

Score: _____

13 questions. Write your answers in the spaces. Answers and step-by-step help are free at websink.site/gcse/maths/ch22-constructions-loci-bearings-vectors/higher/bearings-measuring-drawing-and-back-bearings/

Exercise 22G Bearings: reading, drawing and back bearings Non-calculator

1 Write the bearing of each compass direction.

(a) North

Answer:

(b) East

Answer:

(c) South

Answer:

(d) West

Answer:

(e) North-east

Answer:

(f) South-west

Answer:

2 Write each angle as a three-figure bearing.

(a) 8°

Answer:

(b) 72°

Answer:

(c) 5°

Answer:

(d) 120°

Answer:

3 Write down the bearing shown by each red line.

(a)



Answer:

(b)



Answer:

(c)



Answer:

(d)



Answer:

4 Draw each line. Use a protractor to measure the bearing from the north line at P. Label the end of each line Q.

(a) From P, a line 6 cm long on a bearing of 060°.

Answer:

(b) From P, a line 6 cm long on a bearing of 135°.

Answer:

(c) From P, a line 6 cm long on a bearing of 250°.

Answer:

(d) From P, a line 6 cm long on a bearing of 300°.

Answer:

5 The bearing of Q from P is given. Work out the bearing of P from Q.

(a) 040°

Answer:

(b) 125°

Answer:

(c) 200°

Answer:

(d) 305°

Answer:

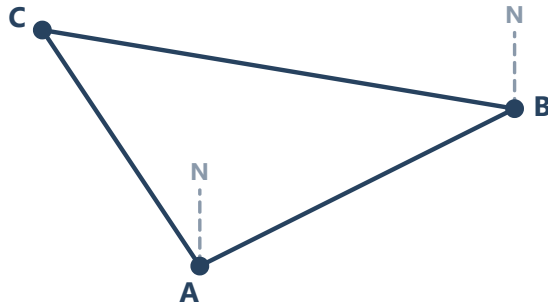
(e) 090°

Answer:

(f) 270°

Answer:

6 The diagram shows the positions of three villages A, B and C, drawn accurately. Use a protractor to measure each bearing.



(a) The bearing of B from A.

Answer:

(b) The bearing of C from A.

Answer:

(c) The bearing of C from B.

Answer:

7 Tom writes the bearing of a town as 5° . Explain why this is not a correct bearing, and write it correctly.

Answer:

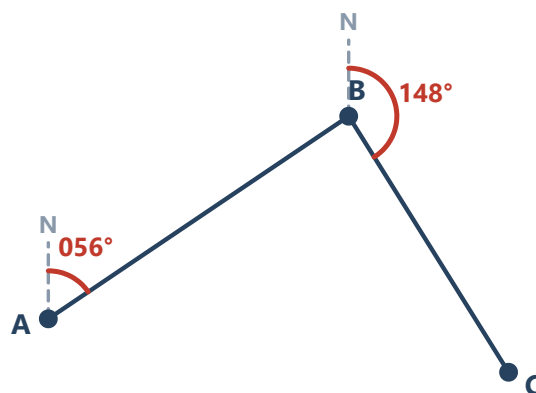
8 The bearing of B from A is 130° . **Show that** the bearing of A from B is 310° .

Answer:

9 The bearing of a ship from a lighthouse is 200° . Work out the bearing of the lighthouse from the ship.

Answer:

10 The bearing of B from A is 056° . The bearing of C from B is 148° . Work out the size of angle ABC.

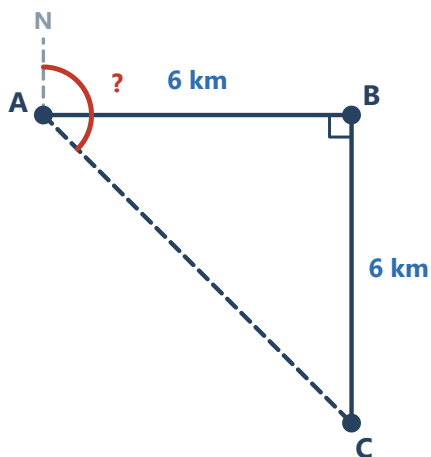


Answer:

11 Three points A, B and C lie on a straight line, with B between A and C. The bearing of B from A is 072° . Work out the bearing of A from C. Give a reason for your answer.

Answer:

- 12** A school, B, is 6 km due east of a station, A. A park, C, is 6 km due south of B. Work out the bearing of C from A.



Answer:

- 13 Challenge.** The bearing of A from B is **three times** the bearing of B from A. Work out the bearing of B from A.

Answer: