

Bearings with Trigonometry

For AQA GCSE Mathematics (8300) • Higher tier

Name _____

Total marks: **29**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method. You may use a calculator.

- 1** C is North West of D .
Write down the bearing of D from C .

[1 mark]

Answer _____ °

- 2** The bearing of Y from X is 065°
Circle the bearing of X from Y .

[1 mark]

☐ 115°

☐ 245°

☐ 295°

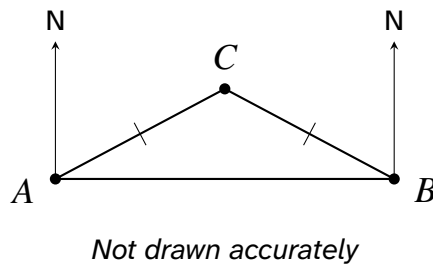
☐ 065°

- 3** X is due West of Y .
 Z is due South of Y .
Angle $YXZ = 35^\circ$
Work out the bearing of Z from X .

[2 marks]

Answer _____ °

- 4 A , B and C are three buoys.
 B is due East of A .
 $AC = BC$
The bearing of C from A is 062°



Work out the bearing of C from B .

[3 marks]

Answer _____ $^\circ$

- 5 A drone flies 7 km from its base D to a point E on a bearing of 040°
It then flies on a bearing of 130° until it reaches a point F that is due East of D .
(a) Work out the distance from E to F .

[4 marks]

Answer _____ km

- (b) Work out the distance from D to F .

[3 marks]

Answer _____ km

- 6** Point Q is 12 km due East of point P .
Point R is 9 km from P on a bearing of 120°
Work out the distance QR .

[4 marks]

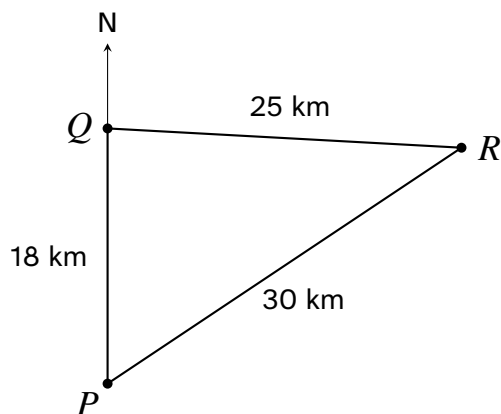
Answer _____ km

- 7** Two boats leave a harbour H at the same time.
Boat A sails on a bearing of 030° at 12 km/h.
Boat B sails on a bearing of 110° at 15 km/h.
Work out the distance between the boats after 2 hours.

[5 marks]

Answer _____ km

- 8 P , Q and R are three towns.
 Q is 18 km due North of P .
 R is 30 km from P and 25 km from Q .
 R is to the East of the line PQ .



Not drawn accurately

- (a) Work out the bearing of R from P .
Give your answer to the nearest degree.

[3 marks]

Answer _____°

- (b) Work out the bearing of R from Q .
Give your answer to the nearest degree.

[3 marks]

Answer _____°