Bearing

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1) June 2010 V3



The diagram shows three points P, Q and R on horizontal ground.

- PQ = 50 m, PR = 100 m and angle $PQR = 140^{\circ}$.
- (a) Calculate angle *PRQ*.

Answer(a) Angle PRQ = [3]

(b) The bearing of R from Q is 100°.

Find the bearing of P from R.

Answer(b) [2]

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13

AOC is a diameter of the circle, centre O. AT is a straight line that cuts the circle at B. PT is the tangent to the circle at C. Angle $COB = 76^{\circ}$.

(a) Calculate angle ATC.

Answer(a) Angle ATC = [2]

(b) T is due north of C.

Calculate the bearing of *B* from *C*.

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Answer(b) [2]



The diagram shows 3 ships A, B and C at sea.

- AB = 5 km, BC = 4.5 km and AC = 2.7 km.
- (a) Calculate angle *ACB*. Show all your working.

Answer(a) Angle ACB =[4]

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(b) The bearing of A from C is 220° .

Calculate the bearing of *B* from *C*.

Answer(b) [1]

12



A helicopter flies 8 km due north from A to B. It then flies 5 km from B to C and returns to A. Angle $ABC = 150^{\circ}$.

(a) Calculate the area of triangle ABC.

Answer(a) km² [2]

(b) Find the bearing of *B* from *C*.

Answer(b) [2]

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5) November 2014 V1

16 A helicopter flies from its base *B* to deliver supplies to two oil rigs at *C* and *D*. *C* is 6 km due east of *B* and the distance from *C* to *D* is 8 km. *D* is on a bearing of 120° from *B*.

6km

North

C

NOT TO

SCALE

.....[2]

8 km

North

В

 120°

6) June 2018 V2

7 A and B are two towns on a map. The bearing of A from B is 140°.

Find the bearing of D from C

Work out the bearing of *B* from *A*.

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