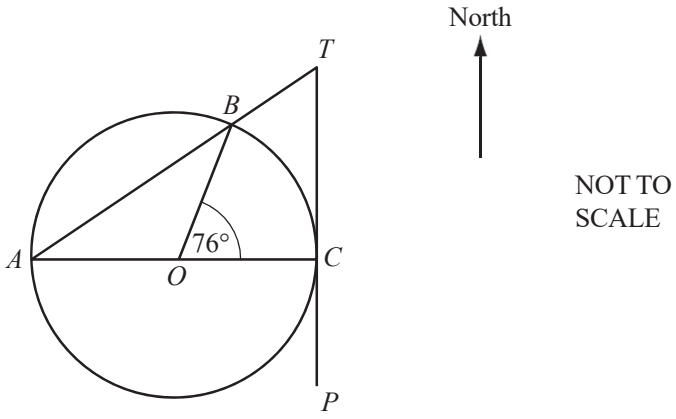
EXAM PAPERS PRACTICE

Bearings

Question Paper

Question 1



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 $COB = 76°$.

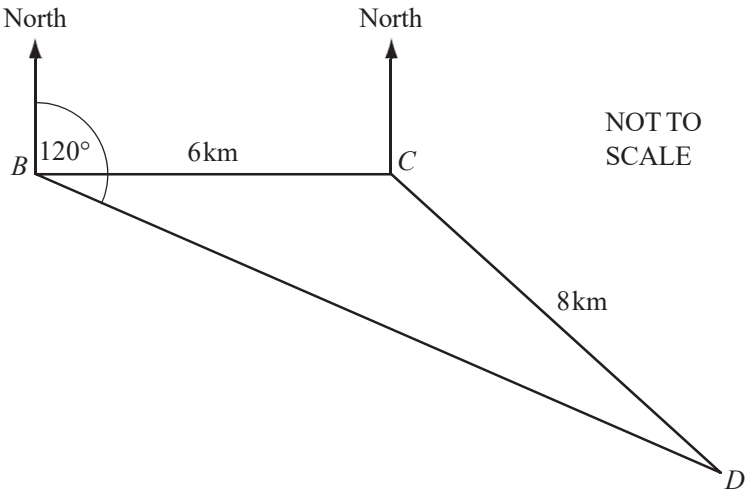
(a) Calculate angle ATC. [2]

(b) T is due north of C.

Calculate the bearing of B from C. [2]

Question 2

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.



Find the bearing of D from C. [5]

Question 3

From a harbour, H, the bearing of a ship, S, is 312°. The ship is 3.5 km from the harbour.

(a) Draw a sketch to show this information.
Label H, S, the length 3.5 km and the angle 312°.

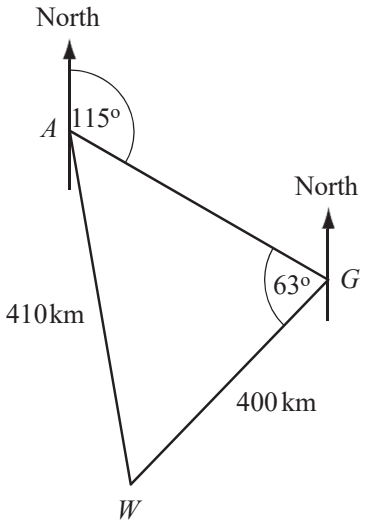
[2]

(b) Calculate how far north the ship is of the harbour.

[2]

Question 4

A plane flies from Auckland (A) to Gisborne (G) on a bearing of 115°.
The plane then flies on to Wellington (W). Angle $AGW = 63°$.



NOT TO SCALE

(a) Calculate the bearing of Wellington from Gisborne.

[2]

(b) The distance from Wellington to Gisborne is 400 kilometres.
The distance from Auckland to Wellington is 410 kilometres.

Calculate the bearing of Wellington from Auckland.

[4]