

Bearings

Difficulty: Easy

Question Paper 1

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Trigonometry
Sub-Topic	Bearings
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 1

Time allowed: 24 minutes

Score: /19

Percentage: /100

Grade Boundaries:

CIE IGCSE Maths (0580)

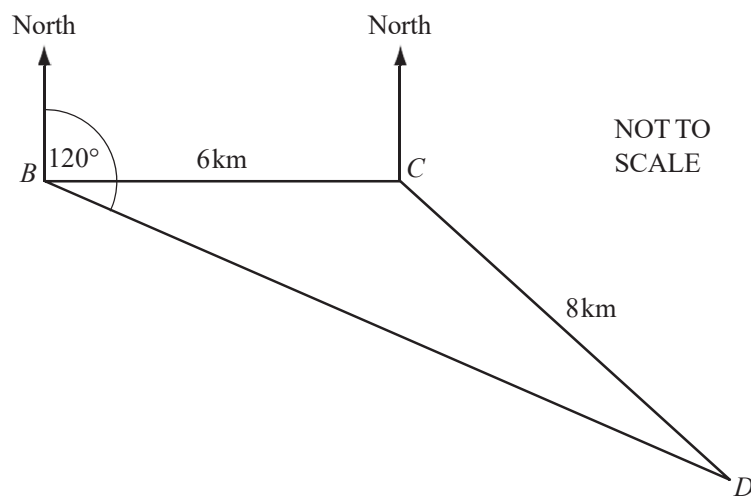
A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

Question 1

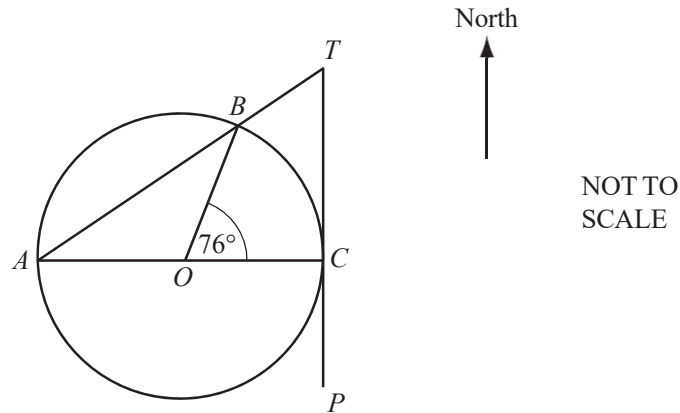
A helicopter flies from its base B to deliver supplies to two oil rigs at C and D .
 C is 6 km due east of B and the distance from C to D is 8 km.
 D is on a bearing of 120° from B .



Find the bearing of D from C .

[5]

Question 2



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 $COB = 76^\circ$.

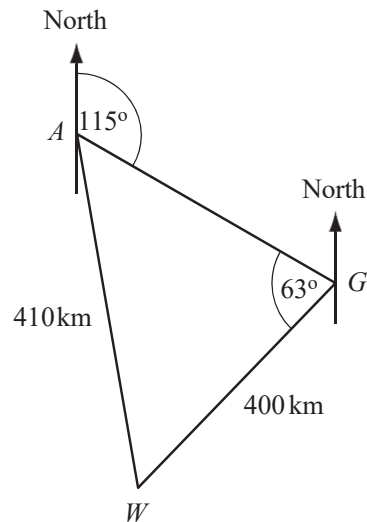
(a) Calculate angle ATC . [2]

(b) T is due north of C .

Calculate the bearing of B from C . [2]

Question 3

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



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(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]

Question 4

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]