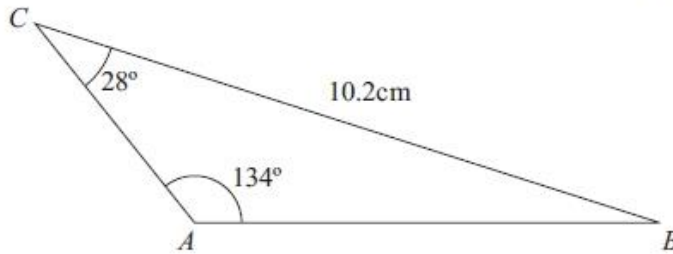


G257 Sine rule

Q1.

The diagram shows triangle ABC .

Diagram NOT
accurately drawn



Angle $BCA = 28^\circ$
Angle $CAB = 134^\circ$
 $BC = 10.2$ cm.

Calculate the length of AB .
Give your answer correct to 3 significant figures.

..... cm

(Total for question = 3 marks)

Q2.

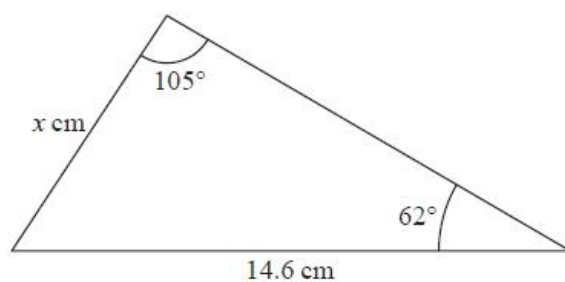


Diagram **NOT**
accurately drawn

Work out the value of x .
Give your answer correct to 1 decimal place.

$x = \dots\dots\dots$

(Total for question = 3 marks)

Q3.

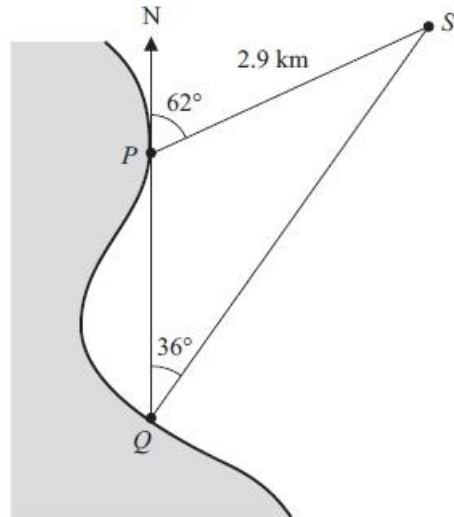


Diagram NOT
accurately drawn

P and *Q* are two points on a coast.
P is due North of *Q*.
A ship is at the point *S*.
 $PS = 2.9$ km.
The bearing of the ship from *P* is 062°
The bearing of the ship from *Q* is 036°

Calculate the distance *QS*.
Give your answer correct to 3 significant figures.

.....km

(Total for question = 3 marks)

Q4.

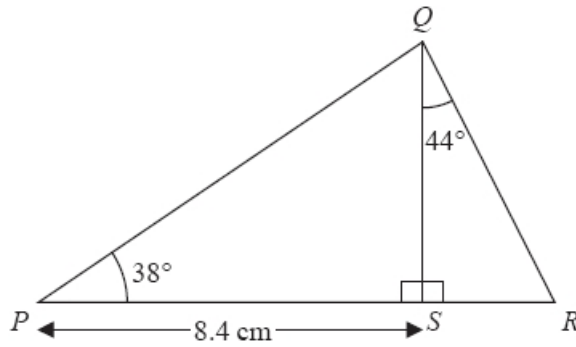


Diagram **NOT**
accurately drawn

PSR is a straight line.

Angle *PSQ* = 90°

PS = 8.4cm

Angle *QPS* = 38°

Angle *SQR* = 44°

Work out the length of *QR*.

Give your answer correct to 3 significant figures.

..... cm

(Total for question = 4 marks)

Q5.

A, *B* and *C* are three towns.

The bearing of *B* from *A* is 105°

The bearing of *C* from *B* is 230°

The distance of *C* from *A* is 180 km.

The distance of *C* from *B* is 95 km.

Calculate the distance of *B* from *A*.

Give your answer correct to 3 significant figures.

..... km

(Total for question = 5 marks)

Q6.

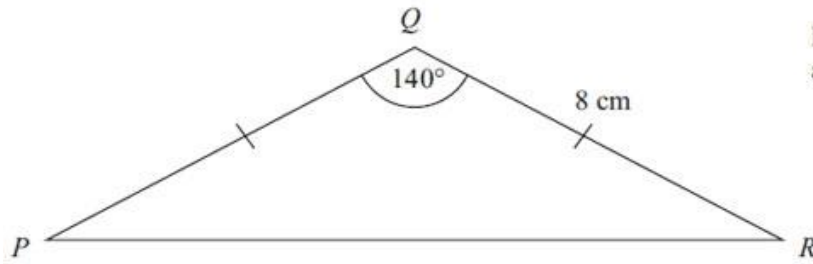


Diagram **NOT**
accurately drawn

Calculate the length of PR .
Give your answer correct to 3 significant figures.

(Total for Question is 3 marks)

Q7.

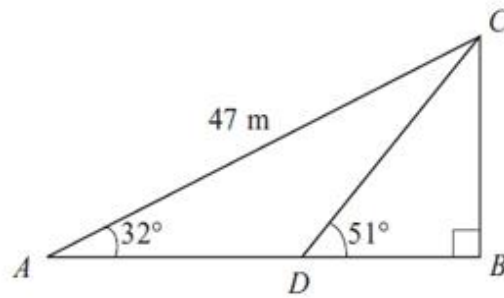


Diagram NOT
accurately drawn

Triangle ABC is right-angled at B.

Angle BAC = 32°

AC = 47 m.

D is the point on AB such that angle BDC = 51°

Calculate the length of BD.

Give your answer correct to 3 significant figures.

(i) the number on the second counter is 2 more than the number on the first counter,

..... m

(Total for question = 5 marks)