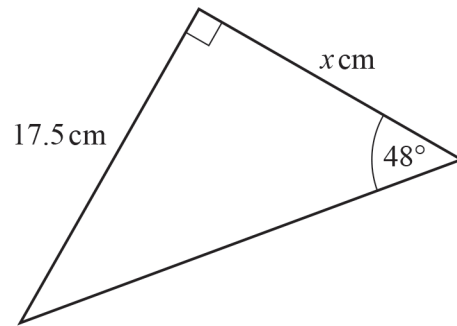


1



NOT TO
SCALE

The diagram shows a right-angled triangle.

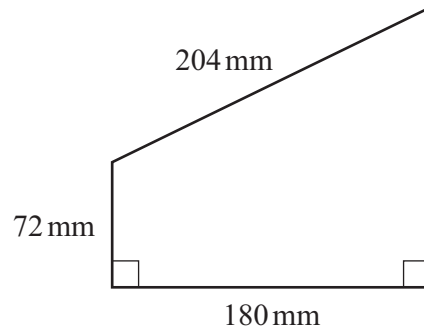
Show that the value of x is 15.8, correct to 3 significant figures.

[3]

[Total: 3]

2

2



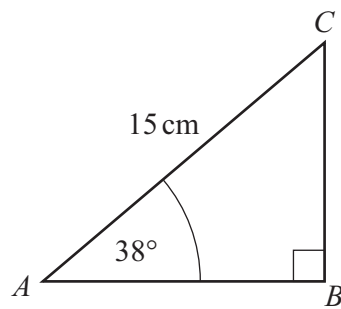
NOT TO
SCALE

Work out the area of this trapezium.

..... mm^2 [5]

[Total: 5]

3



NOT TO
SCALE

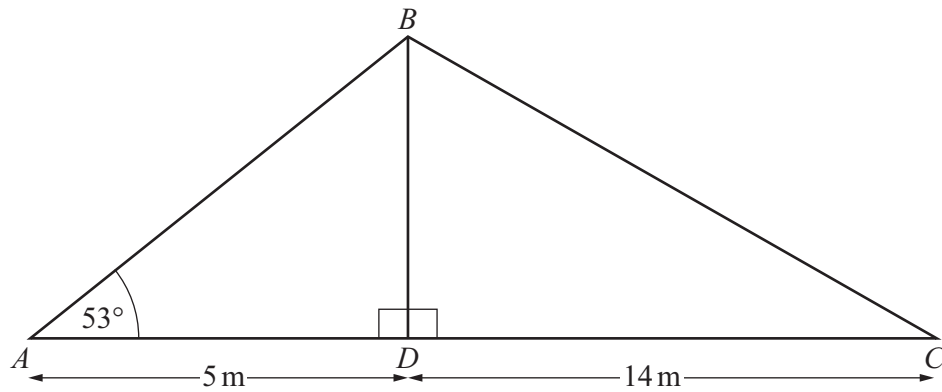
The diagram shows a right-angled triangle, ABC .
 $AC = 15 \text{ cm}$ and angle $BAC = 38^\circ$.

Calculate BC .

$BC =$ cm [2]

[Total: 2]

4

NOT TO
SCALE

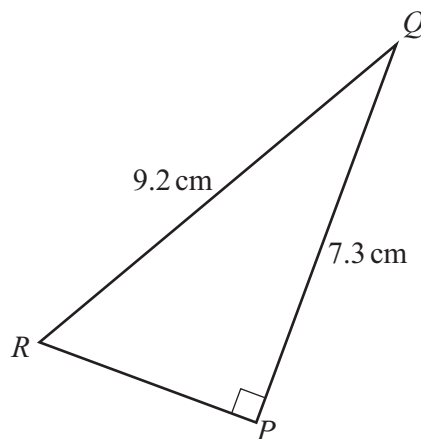
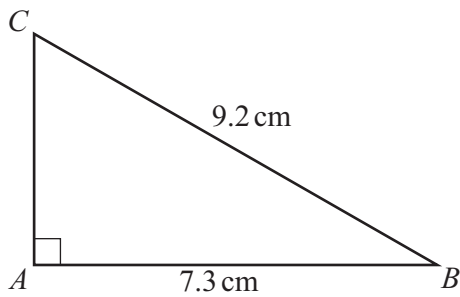
The diagram shows two right-angled triangles, ABD and BCD .
 $AD = 5$ m, $DC = 14$ m and angle $BAD = 53^\circ$.

Calculate BC .

$BC = \dots\dots\dots$ m [4]

[Total: 4]

5

NOT TO
SCALE

The diagram shows two right-angled triangles, ABC and PQR .

- (a) Complete this statement with a geometrical term.

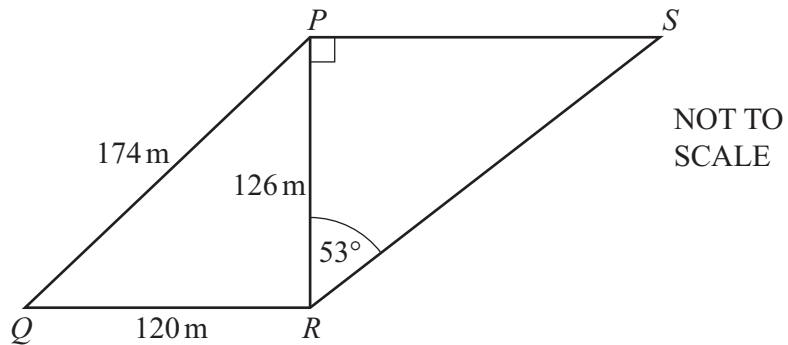
Triangle ABC is to triangle PQR . [1]

- (b) Calculate angle ABC .

Angle $ABC =$ [2]

[Total: 3]

6



The diagram shows Tarak's two triangular fields, PQR and PRS .

Angle $RPS = 90^\circ$ and angle $PRS = 53^\circ$.

$PQ = 174\text{ m}$, $QR = 120\text{ m}$ and $PR = 126\text{ m}$.

- (a) Show that angle $PRQ = 90^\circ$.

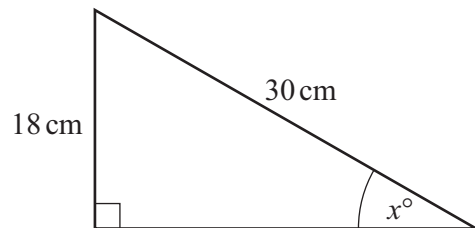
[2]

- (b) Calculate the area of the quadrilateral $PQRS$.
Give your answer correct to 4 significant figures.

..... m^2 [5]

[Total: 7]

7



NOT TO
SCALE

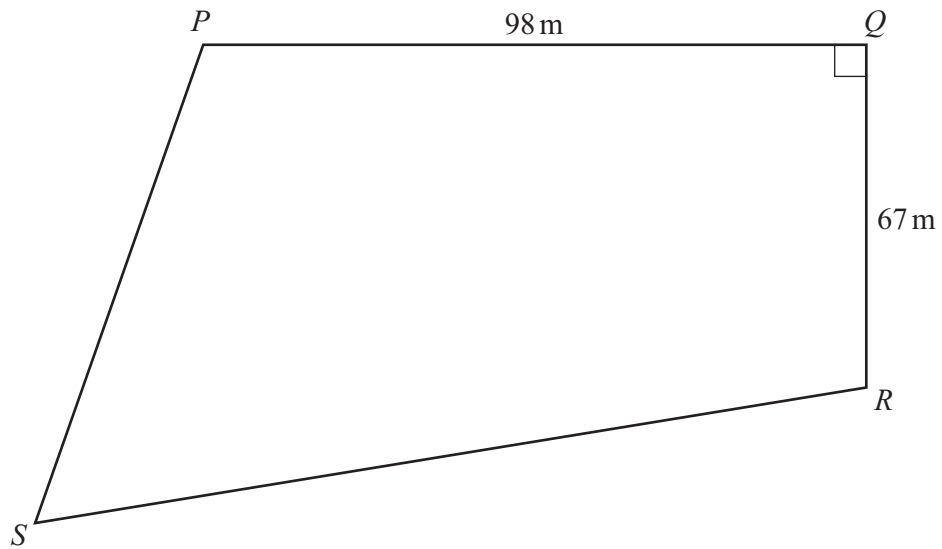
The diagram shows a right-angled triangle.

Show that the value of x is 36.9, correct to 1 decimal place.

[2]

[Total: 2]

8

NOT TO
SCALE

The diagram shows a field $PQRS$.

$PQ = 98$ m, $QR = 67$ m and angle $PQR = 90^\circ$.

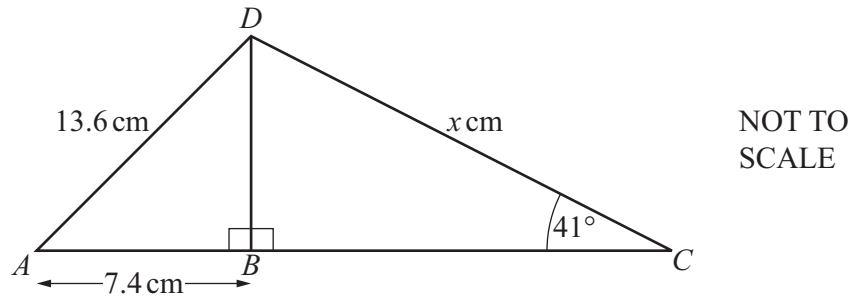
There is a straight path from P to R .

Calculate the length of this path.

..... m [2]

[Total: 2]

9

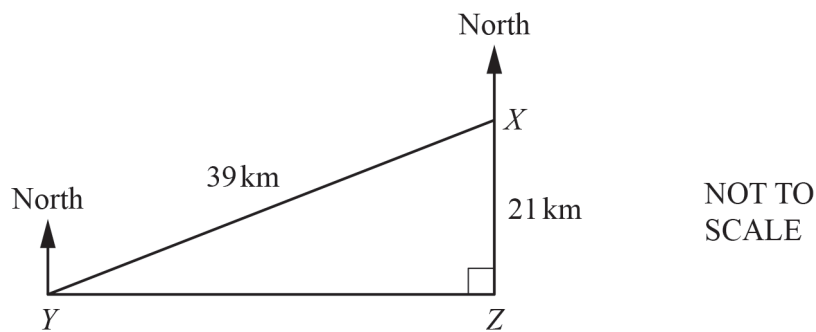


Calculate the value of x .

$x = \dots\dots\dots$ [5]

[Total: 5]

10



A speedboat starts at X and travels to Y , then to Z and then back to X .
 Z is due south of X and Y is due west of Z .
 $XY = 39 \text{ km}$ and $XZ = 21 \text{ km}$.

(a) Calculate YZ .

$YZ = \dots\dots\dots$ [3]

(b) Calculate angle YXZ .

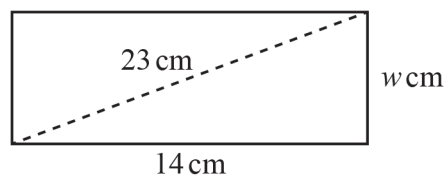
Angle $YXZ = \dots\dots\dots$ [2]

(c) Find the bearing of Y from X .

$\dots\dots\dots$ [1]

[Total: 6]

11



NOT TO
SCALE

The diagram shows a rectangle 14 cm by w cm.
The diagonal is 23 cm.

Calculate the value of w .

$w = \dots\dots\dots$ [3]

[Total: 3]