1

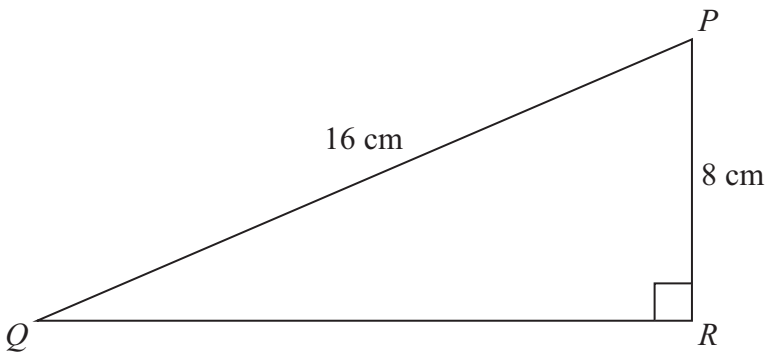


Diagram **NOT** accurately drawn

PQR is a right-angled triangle.
PQ = 16 cm.
PR = 8 cm.

Calculate the length of *QR*.
Give your answer correct to 2 decimal places.

..... cm

(Total 3 marks)

2

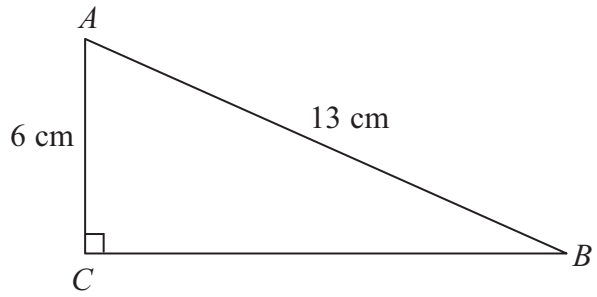


Diagram **NOT** accurately drawn

ABC is a right-angled triangle.
AC = 6 cm
AB = 13 cm

(a) Work out the length of *BC*.
Give your answer correct to 3 significant figures.

..... cm

(3)

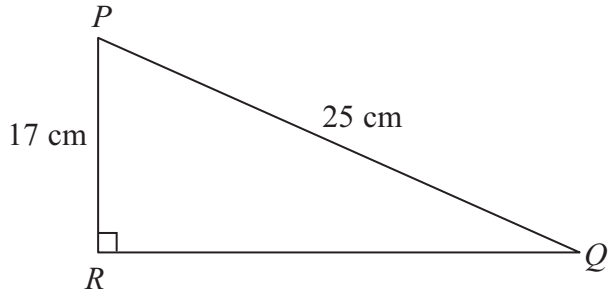


Diagram **NOT** accurately drawn

PQR is a right-angled triangle.
PR = 17 cm
PQ = 25 cm

(b) Work out the size of angle *RPQ*.
Give your answer correct to 1 decimal place.

°

.....

(3)

(Total for Question 2 is 6 marks)

3 PQR is a right-angled triangle

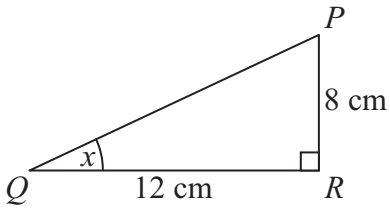


Diagram **NOT** accurately drawn

$PR = 8$ cm.
$QR = 12$ cm.

(a) Find the size of the angle marked x.
Give your answer correct to 1 decimal place.

..... °

(3)

XYZ is a different right-angled triangle.

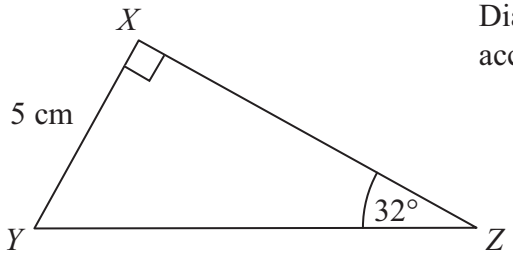


Diagram **NOT** accurately drawn

XY = 5 cm.
Angle *Z* = 32°.

(b) Calculate the length *YZ*.
Give your answer correct to 3 significant figures.

..... cm
(3)

(Total 6 marks)

4 Here is a right-angled triangle.

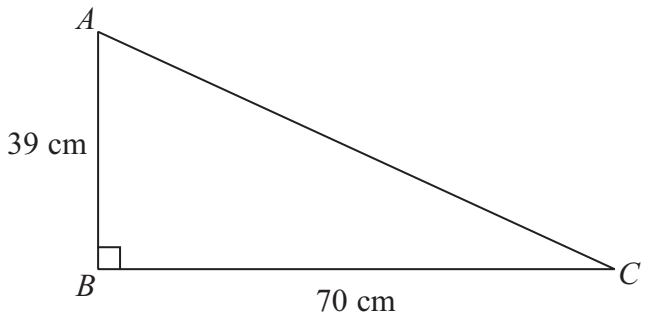


Diagram **NOT** accurately drawn

Work out the length of AC.
Give your answer correct to 1 decimal place.

..... cm

(Total for Question 4 is 3 marks)

5 The diagram shows a quadrilateral *ABCD*.

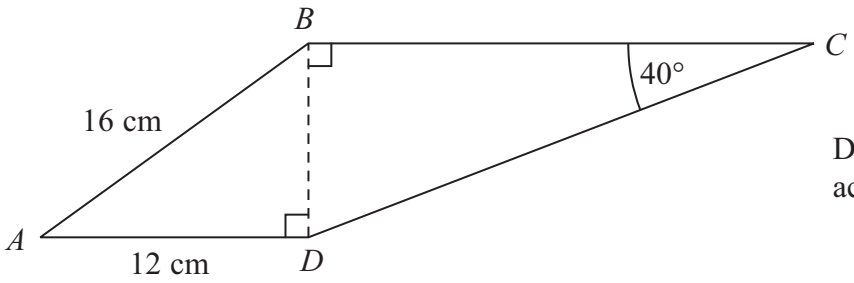


Diagram **NOT** accurately drawn

AB = 16 cm.
AD = 12 cm.
Angle *BCD* = 40°.
Angle *ADB* = angle *CBD* = 90°.

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

..... cm

(Total for Question 5 is 5 marks)

6 Here is a parallelogram.

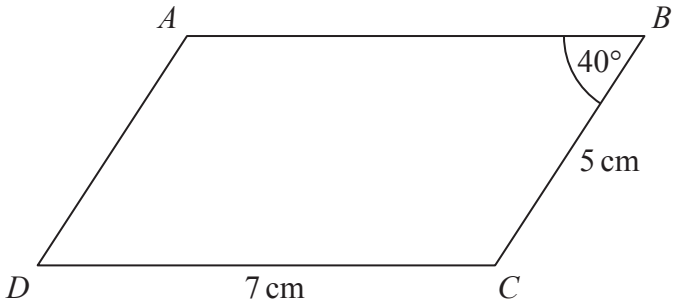


Diagram **NOT** accurately drawn

$DC = 7$ cm
$CB = 5$ cm
Angle ABC is 40°

Work out the area of the parallelogram.
Give your answer correct to 1 decimal place.

..... cm^2

(Total for Question 6 is 3 marks)

7

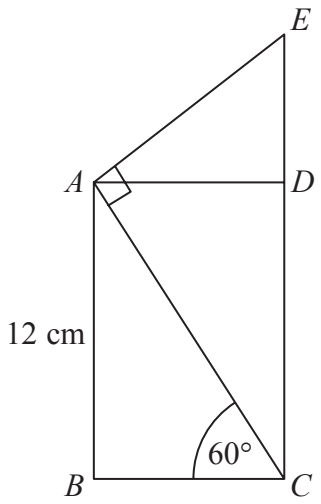


Diagram **NOT** accurately drawn

ABCD is a rectangle.
CDE is a straight line.

AB = 12 cm
Angle *ACB* = 60°
Angle *EAC* = 90°

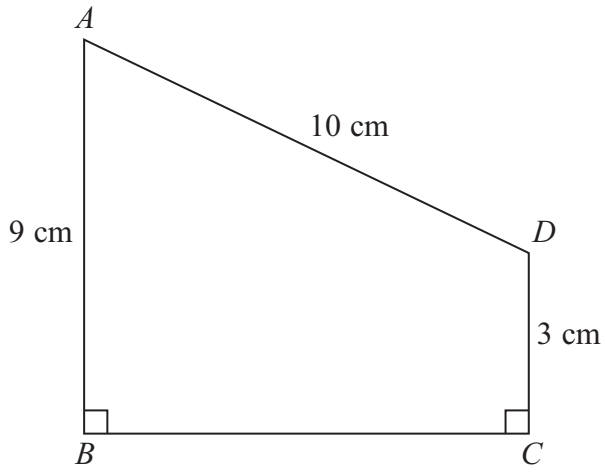
Calculate the length of *CE*.
You must show all your working.

..... cm

(Total for Question 7 is 4 marks)

8 *ABCD* is a trapezium.

Diagram **NOT** accurately drawn



AD = 10 cm
AB = 9 cm
DC = 3 cm
Angle *ABC* = angle *BCD* = 90°

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

..... cm

(Total for Question 8 is 5 marks)

9 *ABC* is an isosceles triangle.

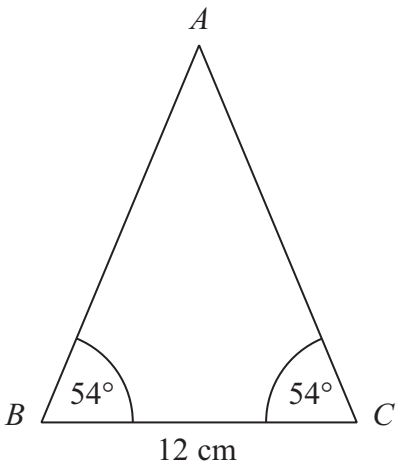


Diagram **NOT** accurately drawn

Work out the area of the triangle.
Give your answer correct to 3 significant figures.

..... cm^2

(Total for Question 9 is 4 marks)

10

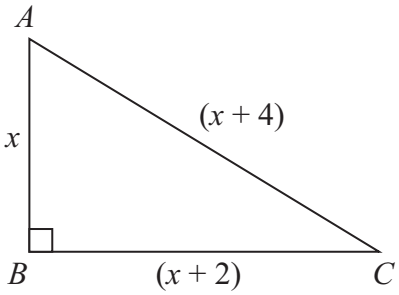


Diagram **NOT** accurately drawn

ABC is a right-angled triangle.
All the measurements are in centimetres.

$AB = x$
$BC = (x + 2)$
$AC = (x + 4)$

(a) Show that $x^2 - 4x - 12 = 0$

(3)

(b) (i) Solve $x^2 - 4x - 12 = 0$

.....

(ii) Hence, write down the length of *AC*.

$AC =$ ..... cm

(4)

(Total 7 marks)

11

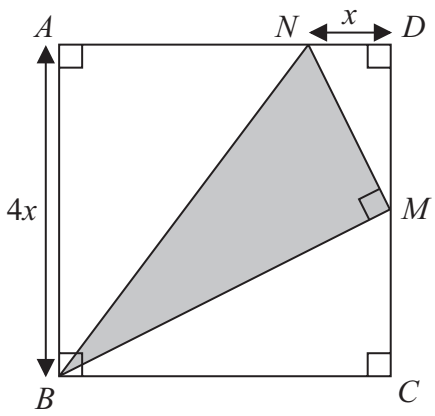


Diagram **NOT** accurately drawn

ABCD is a square with a side length of $4x$
M is the midpoint of *DC*.
N is the point on *AD* where $ND = x$

BMN is a right-angled triangle.

Find an expression, in terms of x, for the area of triangle *BMN*.
Give your expression in its simplest form.

.....

(Total for Question 11 is 4 marks)