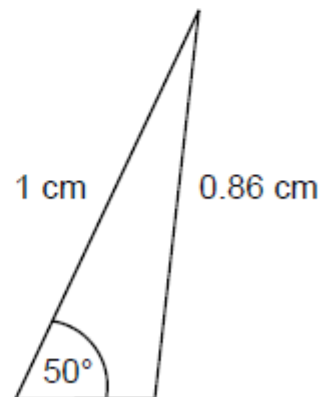
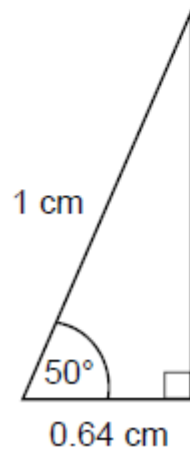
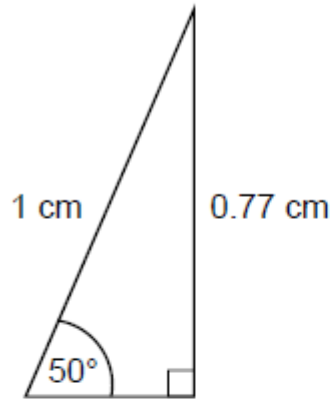


Q1.

Here are sketches of four triangles.

Not drawn accurately



In each triangle
the longest side is **exactly** 1 cm
the other length is given to 2 decimal places.

- (a) Circle the value of $\cos 50^\circ$ to 2 decimal places.

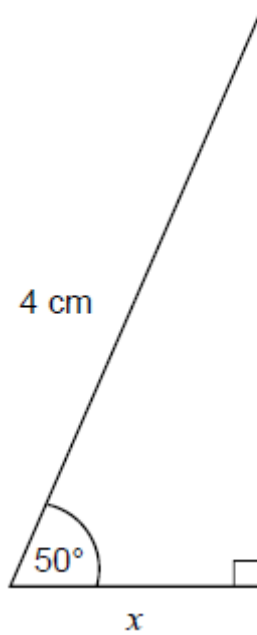
0.77 0.53 0.64 0.86

(1)

(b) Work out the value of x .

Give your answer to 1 decimal place.

Not drawn accurately



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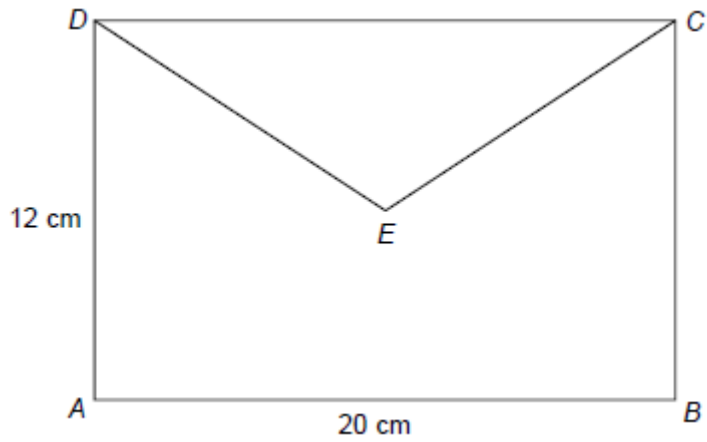
Answercm

(2)
 (Total 3 marks)

Q2.

E is the centre of rectangle $ABCD$.

Not drawn accurately



Work out the length DE .

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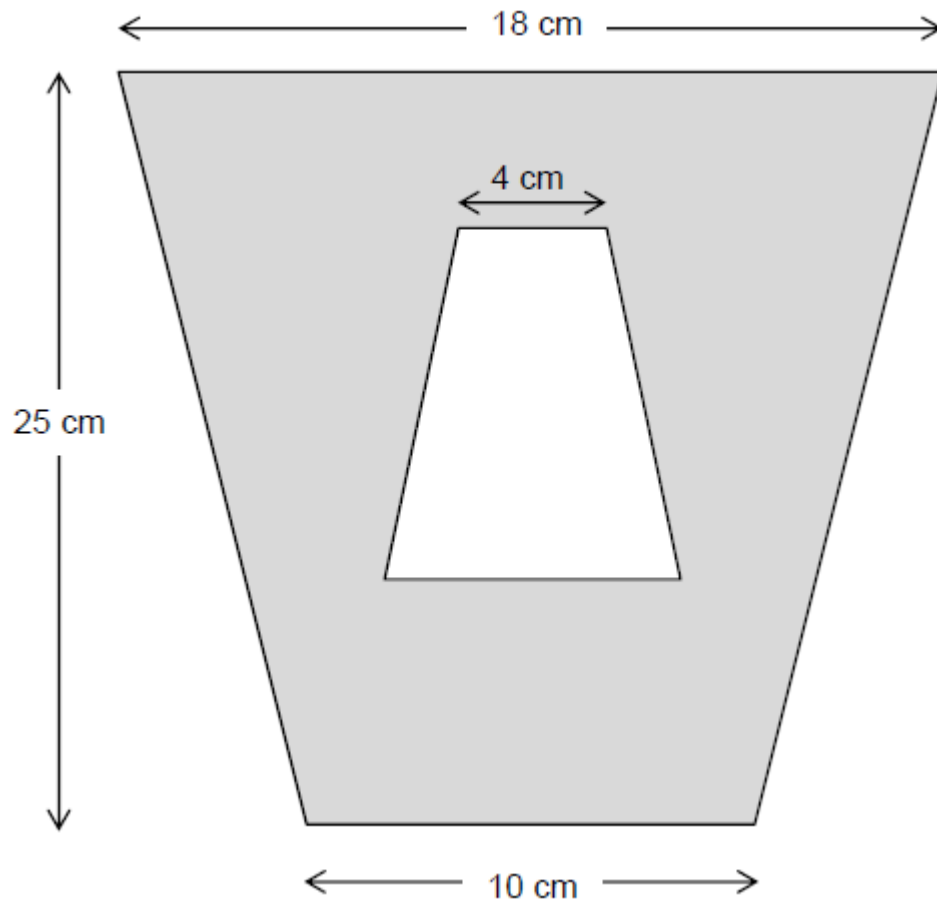
Answer cm

(Total 3 marks)

Q3.

(a) A pattern is made from two **similar** trapeziums.

Not drawn accurately



Show that the shaded area is 294 cm^2

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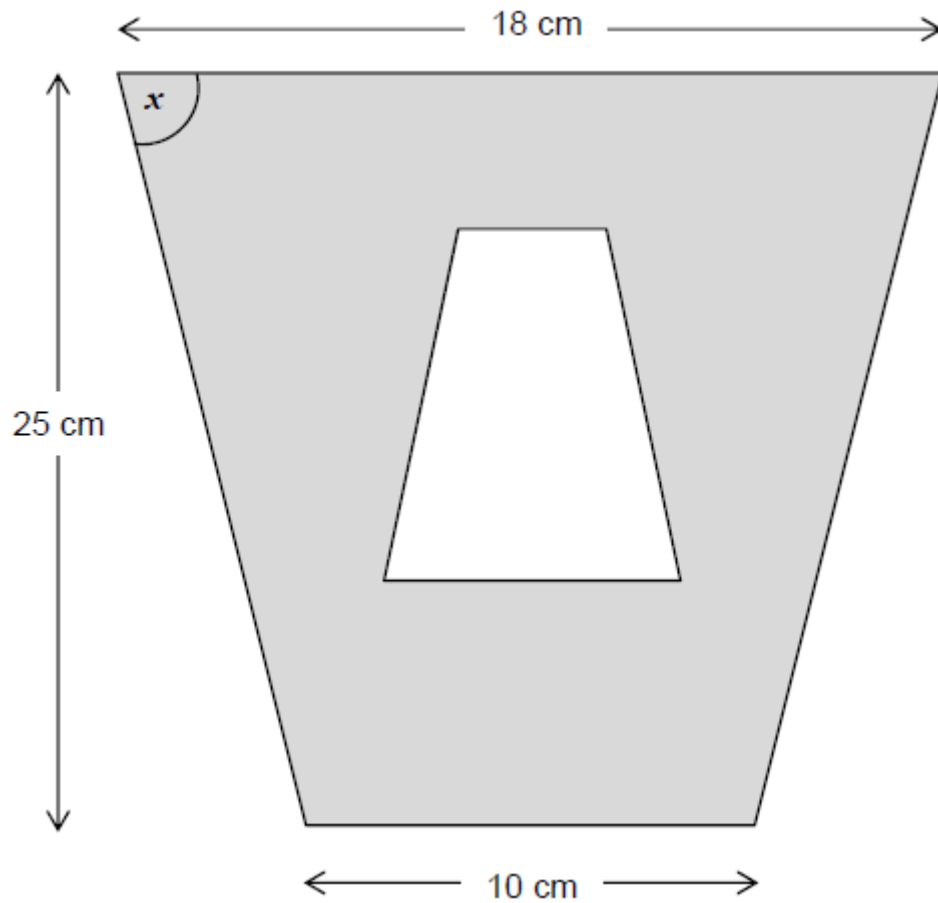
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(4)

(b) The pattern has one line of symmetry.

Not drawn accurately



Work out the size of angle x .

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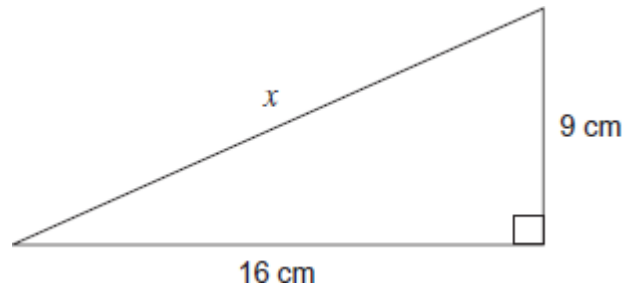
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Answerdegrees

(3)
(Total 7 marks)

Q4.

Not drawn accurately



Work out the length x .
Give your answer to 1 decimal place.

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Answer cm

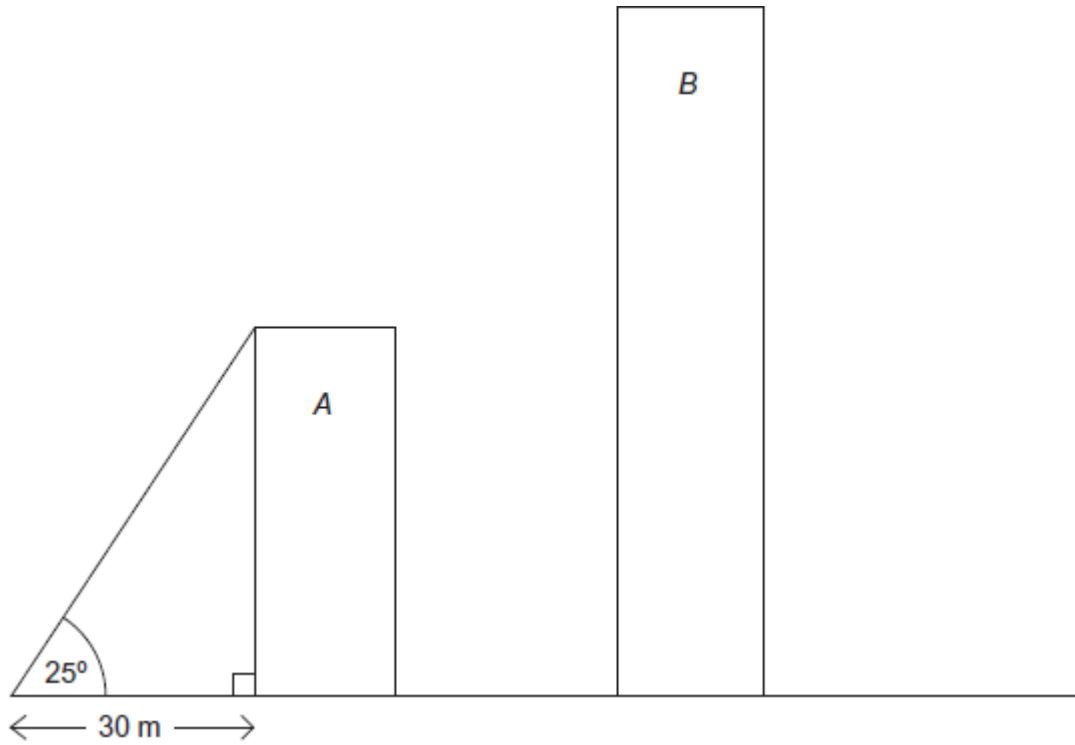
(Total 4 marks)

Q5.

The diagram shows two buildings, A and B .

The heights of the buildings are in the ratio 3 : 5

Not drawn accurately



Work out the height of building *B*.

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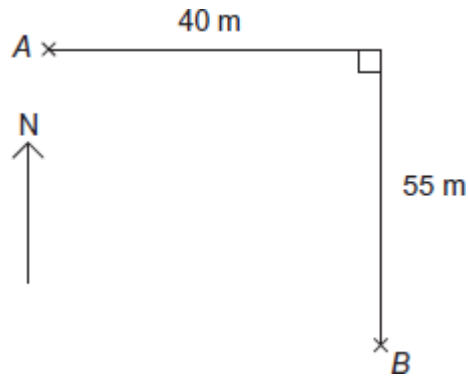
Answer metres

(Total 4 marks)

Q6.

The diagram shows two points *A* and *B*.

Not drawn accurately



Work out the bearing of B from A .

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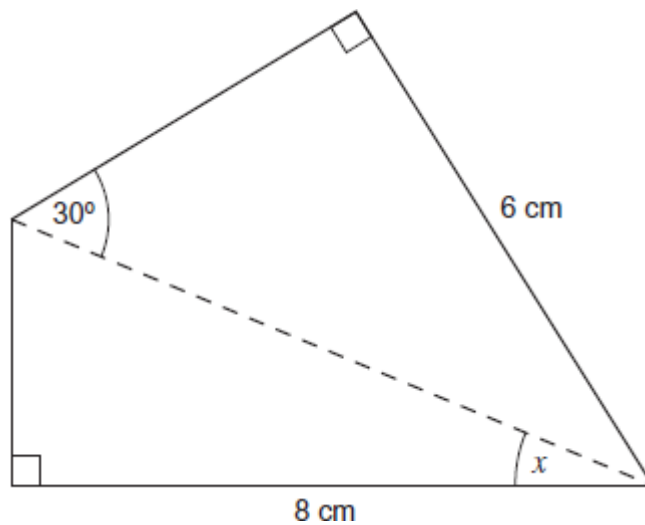
Answer °

(Total 4 marks)

Q7.

The diagram shows a quadrilateral.

Not drawn accurately



Work out the size of angle x .

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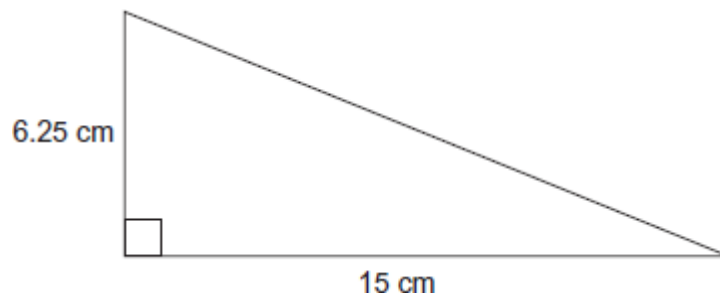
Answer degrees

(Total 4 marks)

Q8.

Work out the length of the hypotenuse.

Not drawn accurately



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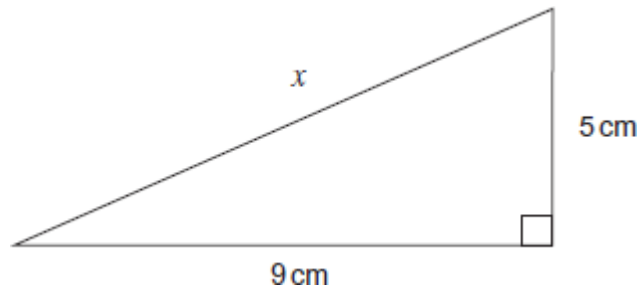
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Answer cm

(Total 3 marks)

Q9.

Not drawn accurately



Work out the length x
Give your answer to 1 decimal place.

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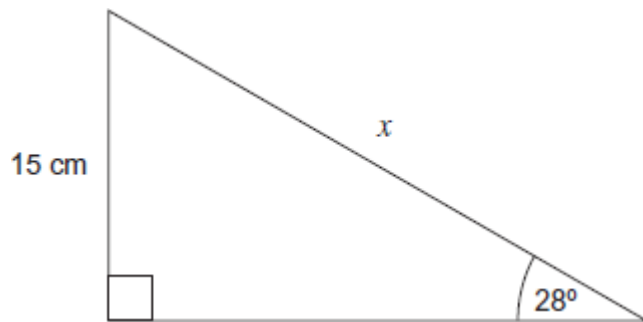
Answercm

(Total 4 marks)

Q10.

Work out the length x .

Not drawn accurately



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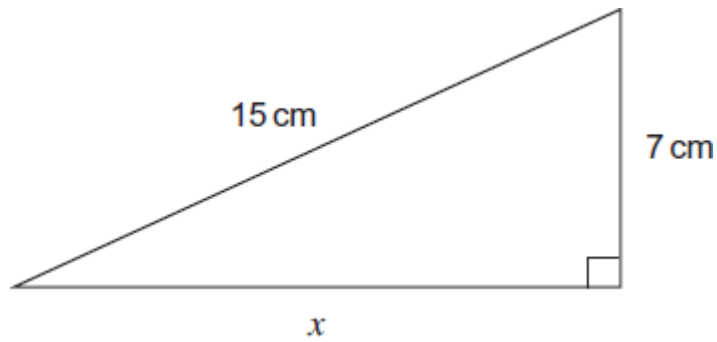
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Answer cm

(Total 3 marks)

Q11. Work out length x .

Not drawn accurately



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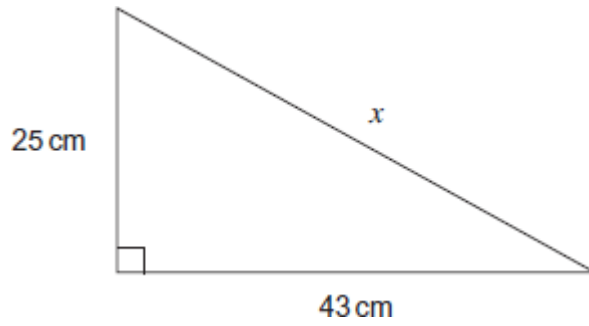
Answer cm

(Total 3 marks)

Q12.

(a) Calculate the length x in the triangle.

Not drawn accurately



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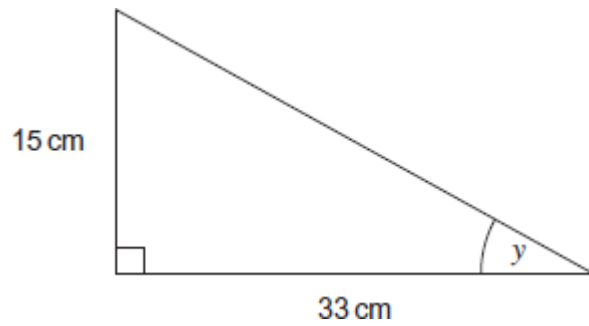
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Answer cm

(3)

(b) Calculate the angle y in the triangle.

Not drawn accurately



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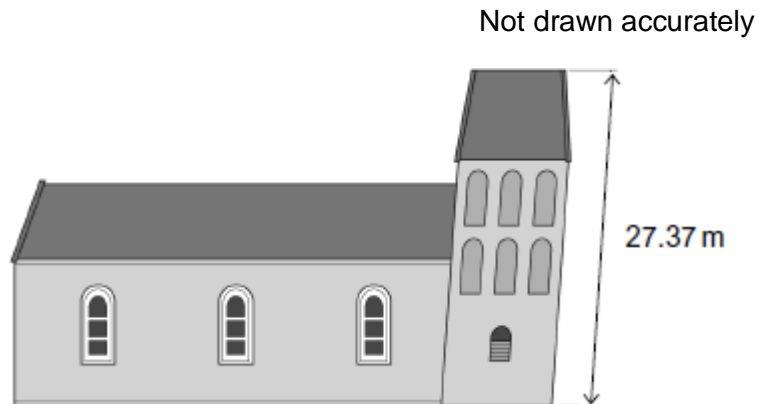
Answer degrees

(3)

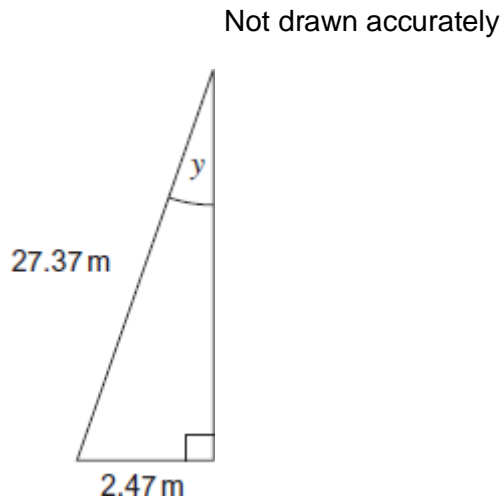
(Total 6 marks)

Q13.

A church tower leans at an angle.



The diagram below shows the angle, y , at which the tower leans.



Work out angle y .

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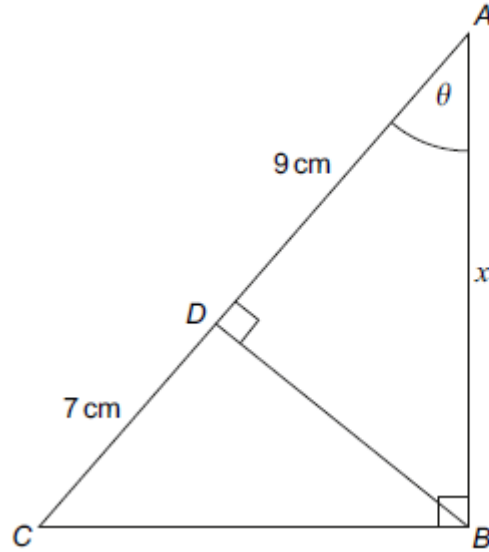
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Answer degrees

(Total 3 marks)

Q14.

ABC is a right-angled triangle.
 D is a point on AC .
 BD is perpendicular to AC .



Not drawn accurately

- (a) Use triangle ABC to write $\cos \theta$ in terms of x

.....

$\cos \theta = \dots\dots\dots$

(1)

- (b) By writing another expression for $\cos \theta$ in terms of x , or otherwise, work out the value of x .

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$x = \dots\dots\dots$ cm

(2)
(Total 3 marks)