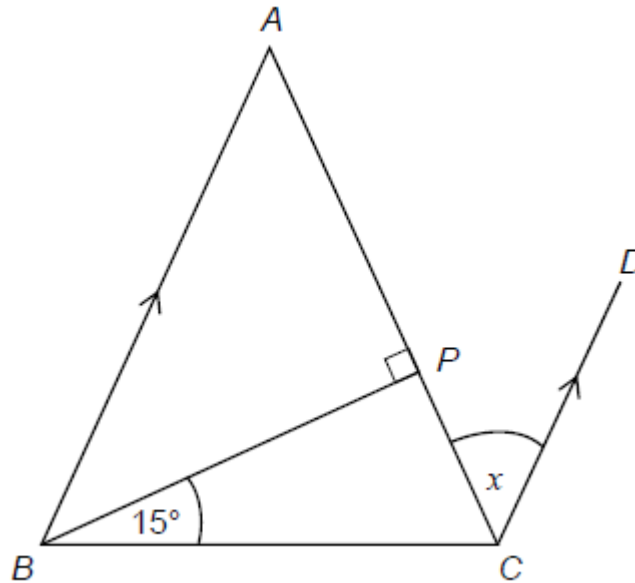


Q1.

ABC is a triangle with $AB = AC$

BA is parallel to CD .

Not drawn accurately



Show that angle $x = 30^\circ$

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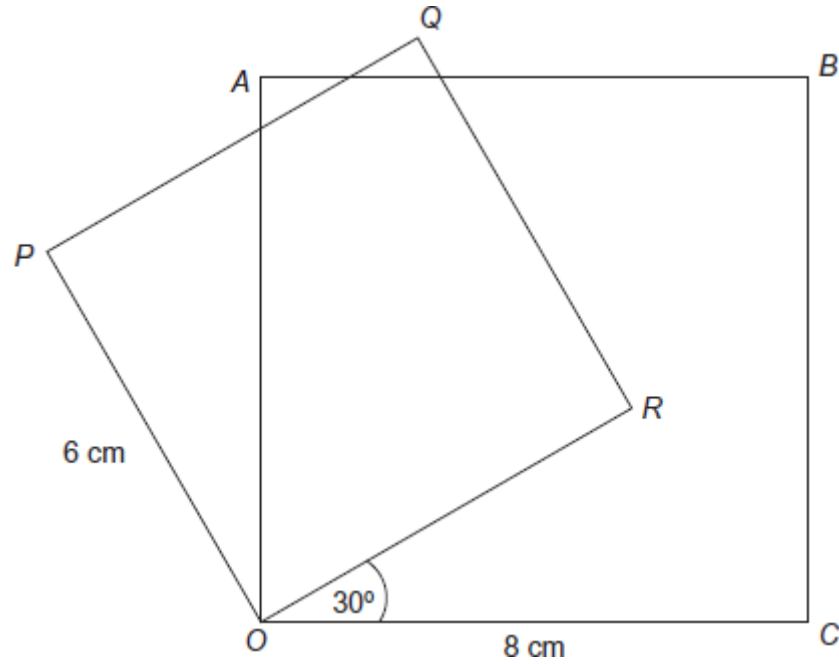
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(Total 3 marks)

Q2.

$OABC$ is a square of side 8 cm
 $OPQR$ is a square of side 6 cm
 Angle ROC is 30°

Not drawn accurately



Prove that triangle ORC and triangle OPA are congruent.

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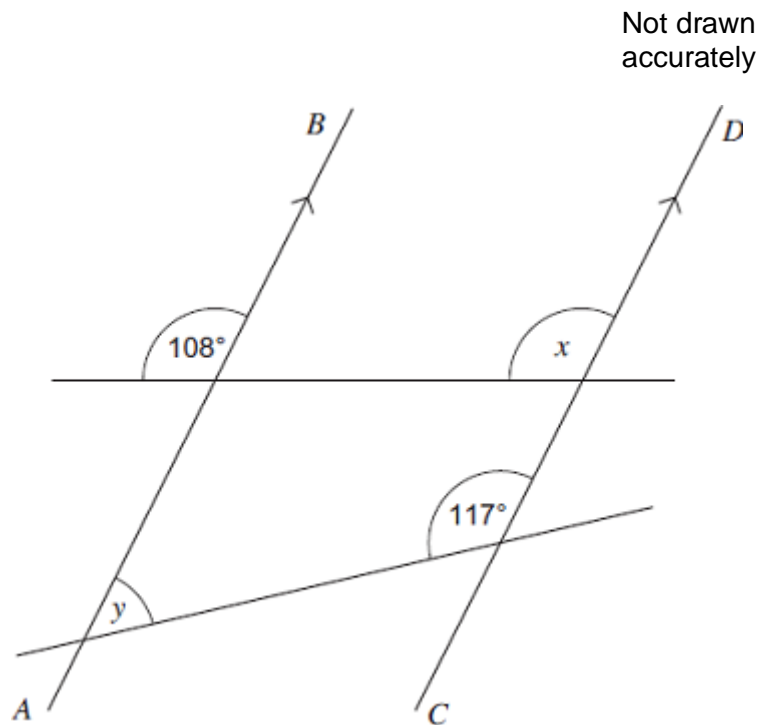
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(Total 4 marks)

Q3. AB is parallel to CD .



- (a) Write down the size of angle x .
Give a reason for your answer.

Answer degrees

Reason

(2)

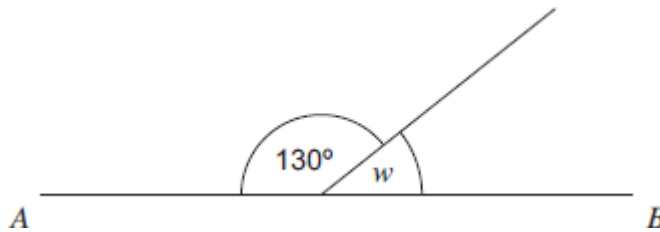
- (b) Work out the size of angle y .

Answer degrees

(2)
(Total 4 marks)

Q4.(a) AB is a straight line.

Not drawn accurately



Work out the value of w .

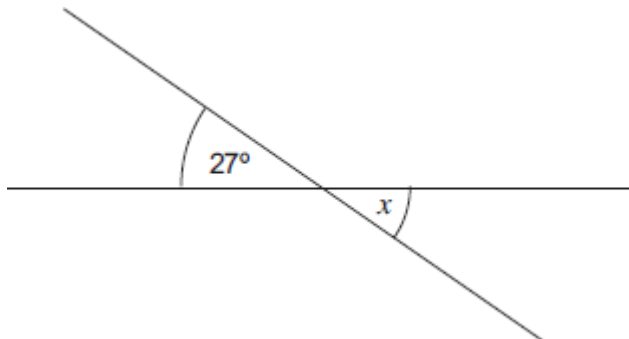
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Answer degrees

(1)

(b) The diagram shows two straight lines.

Not drawn accurately



Write down the value of x .

Answer degrees

(1)

(c) The diagram shows a right-angled triangle.

Not drawn accurately



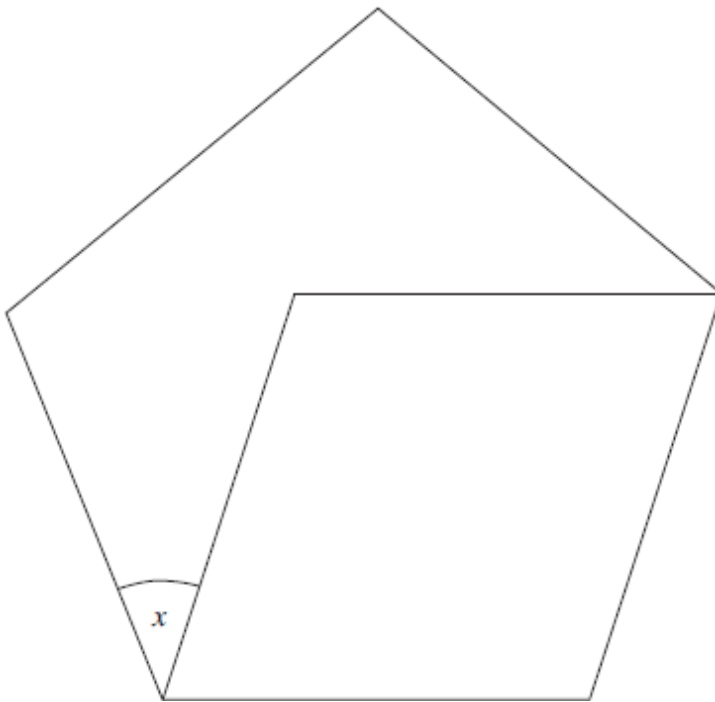
Work out the value of y .

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Answer degrees

(2)
(Total 4 marks)

Q5. The diagram shows a rhombus inside a regular pentagon.



Not drawn accurately

Work out the value of x .

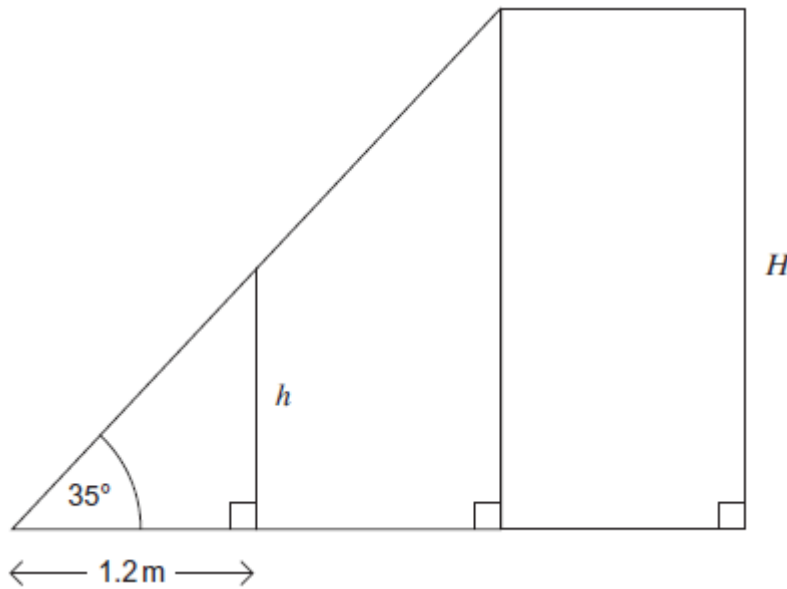
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Answer degrees

(Total 4 marks)

Q6. The diagram shows three pieces of glass in a conservatory roof.

Not drawn accurately



(a) Work out the height, h , of the smallest piece.

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Answer m

(3)

(b) Each piece of glass is the same width, 1.2 metres.

Work out the height, H , of the rectangular piece.

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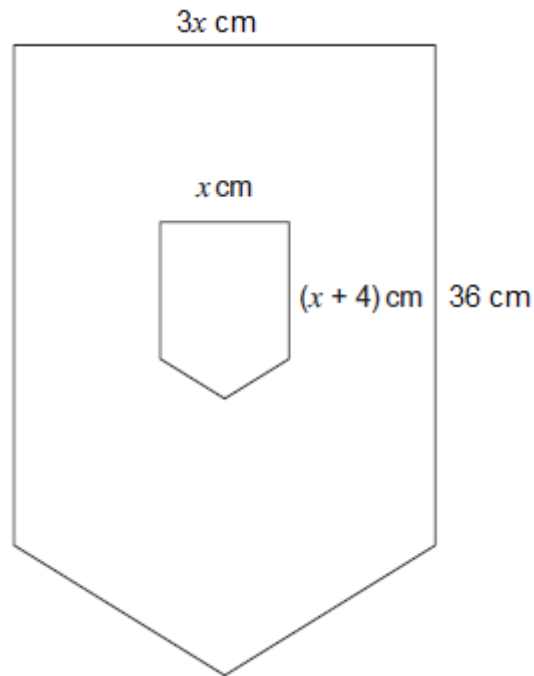
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Answer m

(2)
(Total 5 marks)

Q7. The diagram shows a badge made from two similar pentagons.

Not drawn accurately



Work out the width of the badge.

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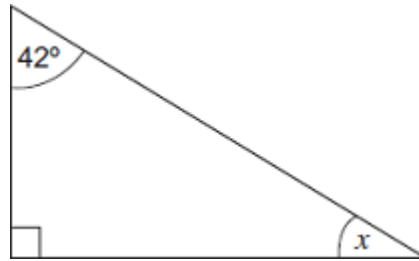
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Answer cm

(Total 5 marks)

Q8.(a) Work out the size of angle x .

Not drawn accurately



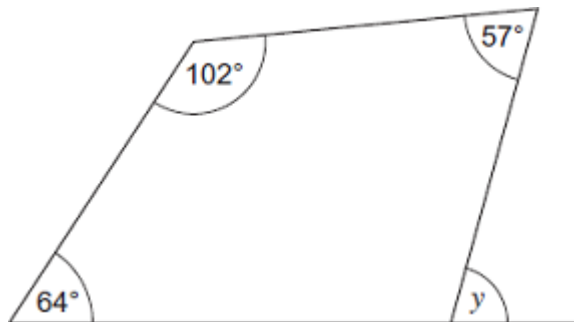
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Answer degrees

(2)

(b) Work out the size of angle y .

Not drawn accurately



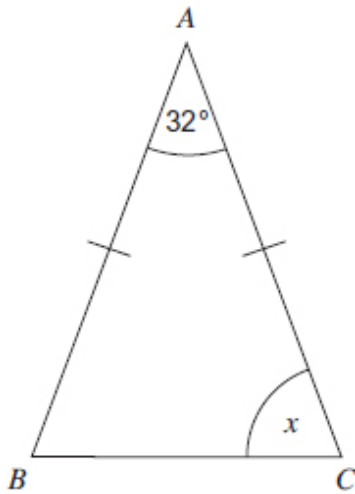
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Answer degrees

(3)
(Total 5 marks)

Q9.(a) In the diagram, $AB = AC$

Not drawn accurately



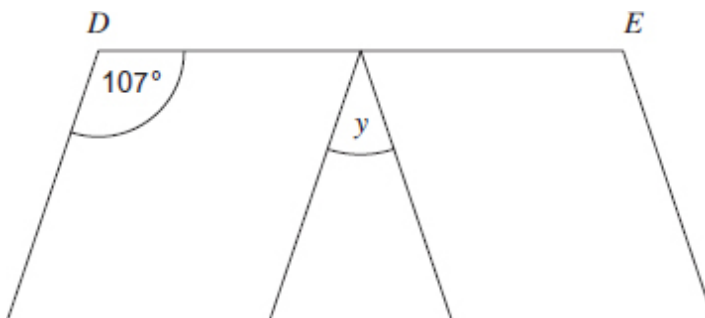
Work out the size of angle x .

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Answer degrees

(2)

(b) A rhombus is reflected as shown.
 DE is a straight line.



Not drawn accurately

Work out the size of angle y .
 Show your working, which may be on the diagram.

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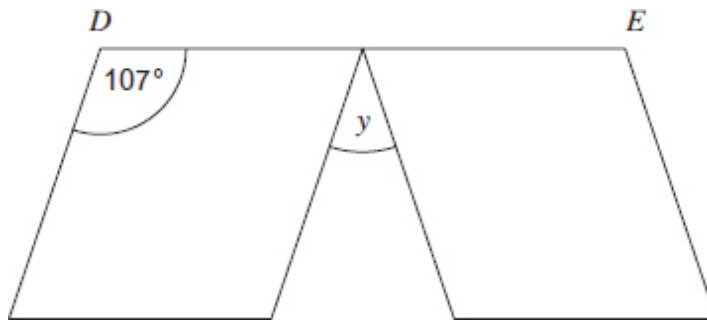
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Answer degrees

(3)
(Total 5 marks)

Q10. A rhombus is reflected as shown.
DE is a straight line.



Not drawn accurately

Work out the size of angle y .
Show your working, which may be on the diagram.

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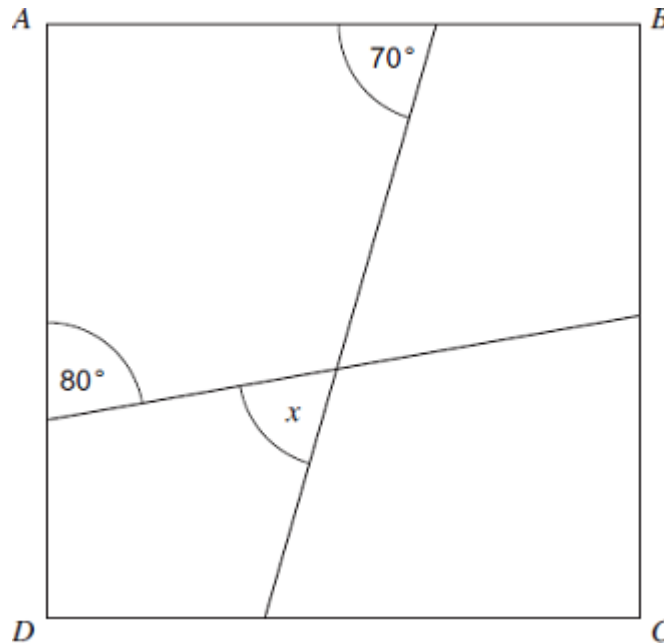
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Answer degrees

(Total 3 marks)

Q11. $ABCD$ is a square.

Not drawn accurately



Work out the size of angle x .
 You **must** show your working, which may be on the diagram.

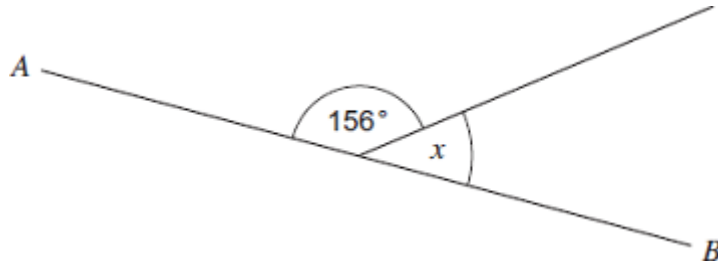
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Answer degrees

(Total 4 marks)

Q12.(a) AB is a straight line.

Not drawn accurately



Work out the size of angle x .

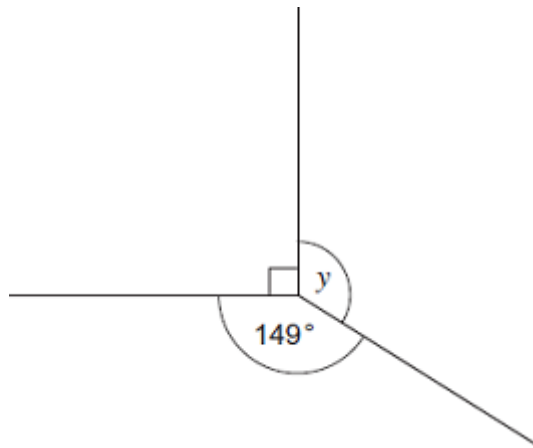
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Answer degrees

(2)

(b) Work out the size of angle y .

Not drawn accurately



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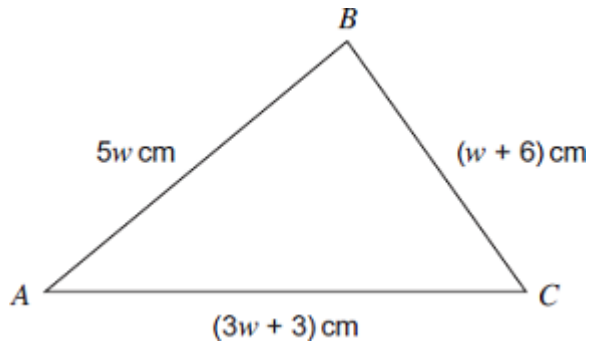
Answer degrees

(2)
(Total 4 marks)

Q13. The diagram shows a triangle ABC .

$$AB = AC$$

Not drawn accurately



Show that the triangle is equilateral.

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(Total 4 marks)