

Surname	
Other Names	
Candidate's Signature	

GCSE 9 - 1 Questions

Similar Shapes - Length

Calculator Allowed

INSTRUCTIONS TO CANDIDATES

Write your name in the space provided.

Write your answers in the spaces provided in this question paper.

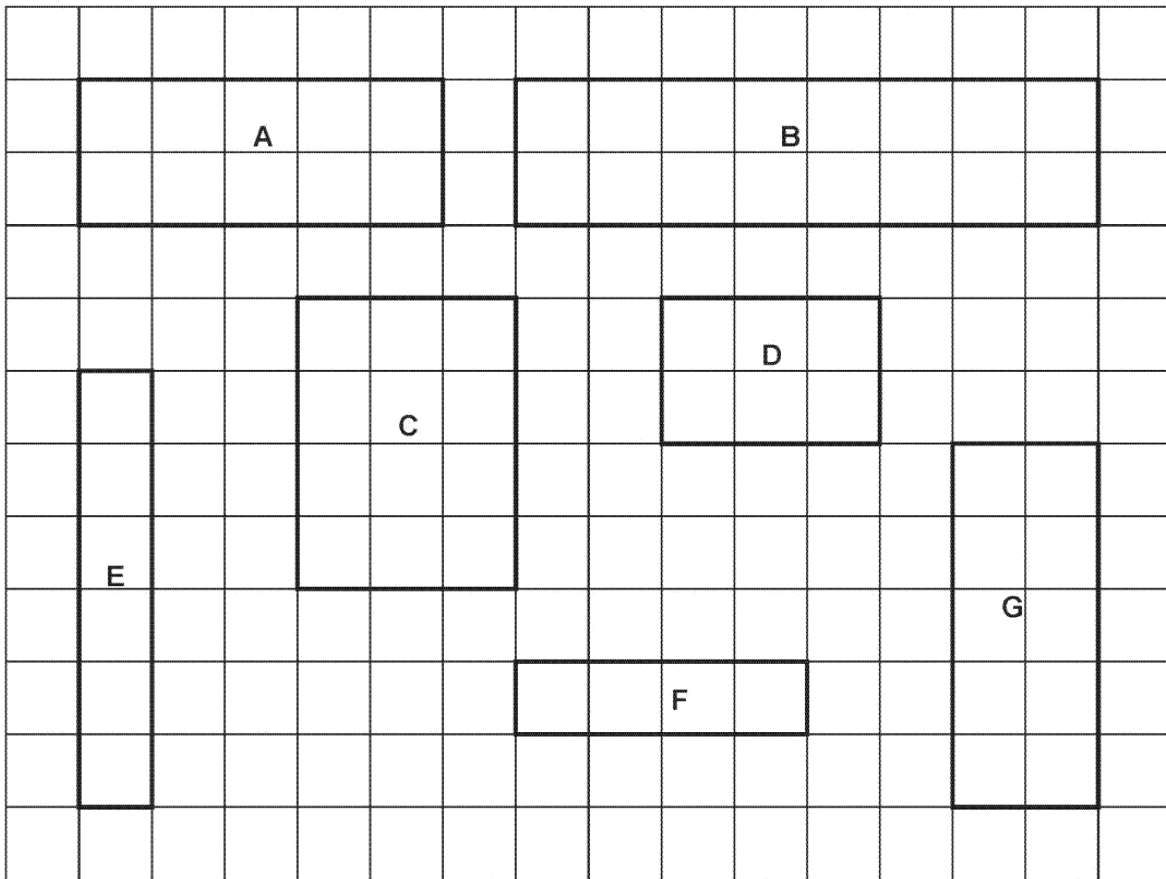
Answer ALL questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

You should have a ruler, compass and protractor where required.

Total Marks :

1) (a) The rectangles below are drawn on a grid of centimetre squares.



(i) Write down the letters of two rectangles that are congruent. [1]

Two rectangles that are congruent are and

(ii) Write down the letters of two rectangles that are not congruent but have the same area. [1]

Two rectangles that are not congruent but have the same area are

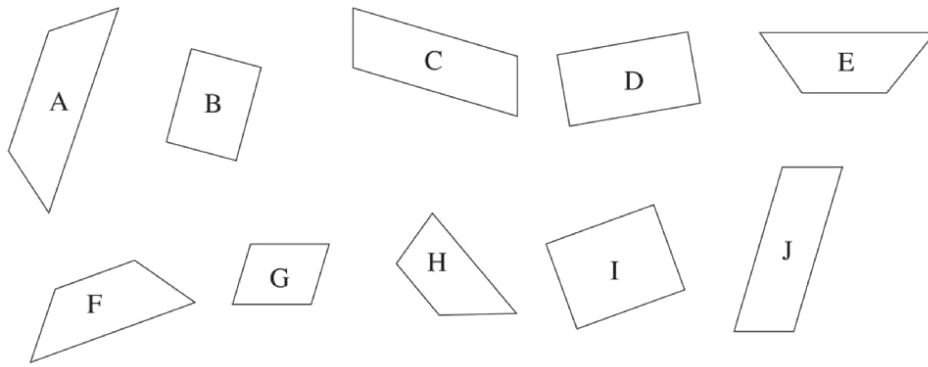
and

(iii) Four of the rectangles have perimeters of equal length. [2]

Write down the letters of these four rectangles and state the size of the perimeter that they have.

..... have a perimeter of cm.

2)



(a) Name two pairs of congruent shapes.

Answer _____ and _____

_____ and _____ [2]

(b) Choose from

SQUARE	RECTANGLE	TRIANGLE	KITE
PARALLELOGRAM	TRAPEZIUM	RHOMBUS	

to complete the sentences

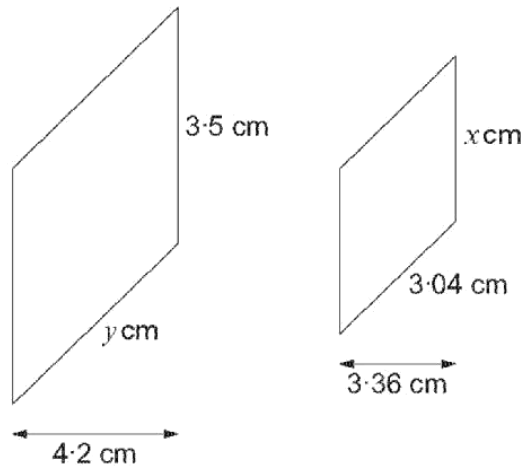
(i) Shape A is a _____

(ii) Shape B is a _____

(iii) Shape C is a _____

[3]

3) The diagram shows two similar shapes.



Calculate x and y .

[4]

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$x =$

$y =$

- 4) Dewi's company is planning a new logo.
The diagram shows two similar versions of the planned logo.

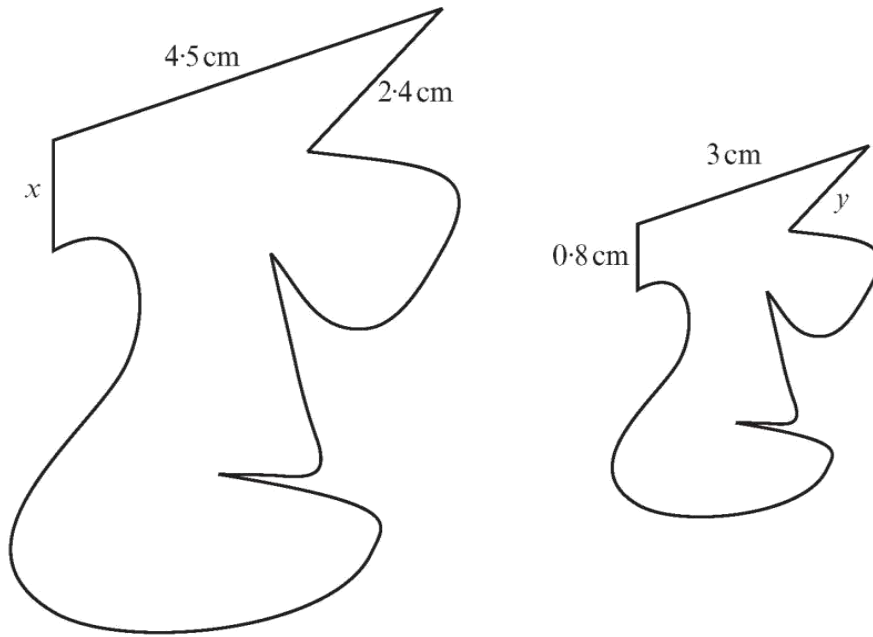


Diagram not drawn to scale

- (a) Calculate the lengths of the sides marked x and y .

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$x = \dots\dots\dots \text{ cm}$

$y = \dots\dots\dots \text{ cm}$

[4]

5) The stars shown below are similar.

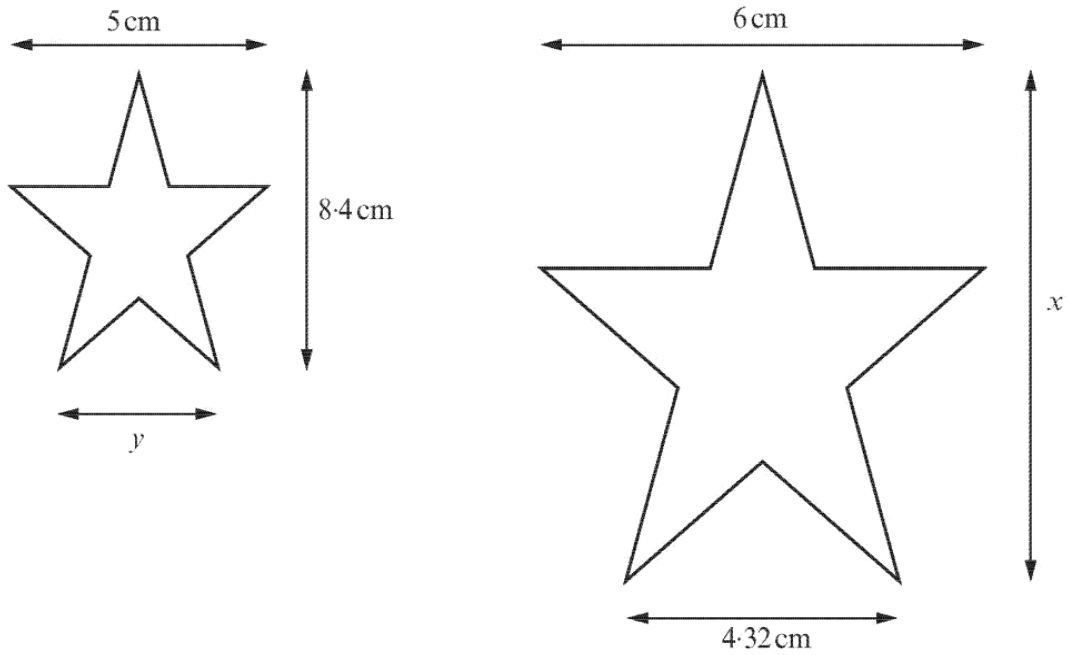


Diagram not drawn to scale

Showing all of your working, find the lengths x and y .

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$x = \dots\dots\dots \text{ cm}$

$y = \dots\dots\dots \text{ cm}$

[4]

6)

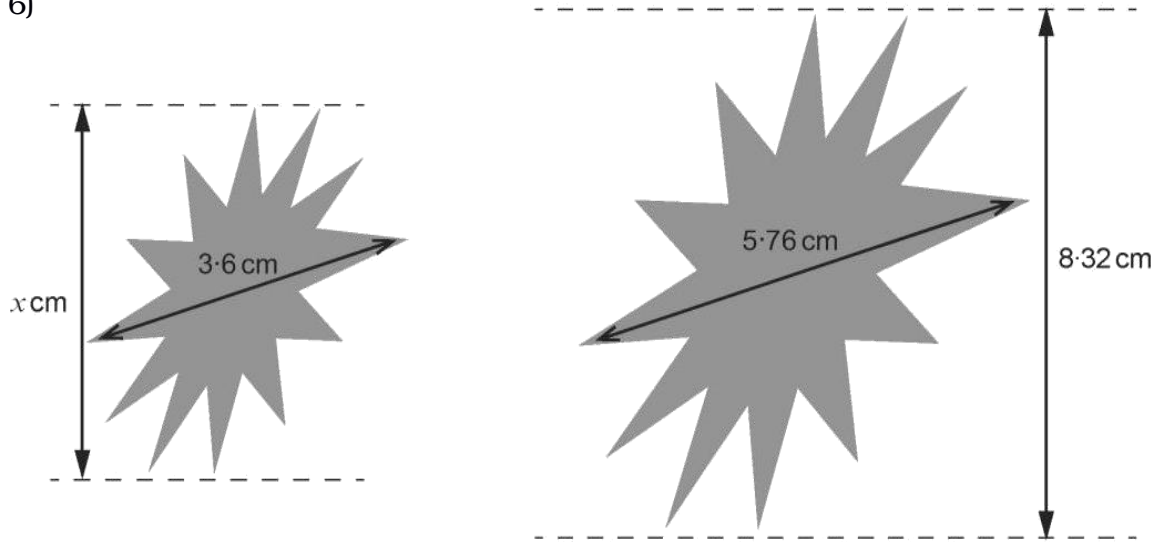


Diagram not drawn to scale

The diagram above shows two similar shapes.

(a) Calculate the length x .

[2]

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7)

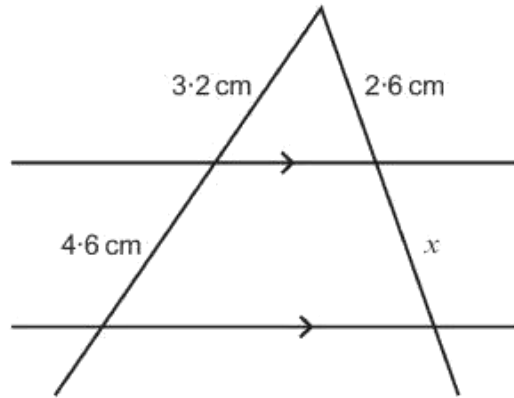


Diagram not drawn to scale

Calculate the length x .
You must show all your working.

[3]

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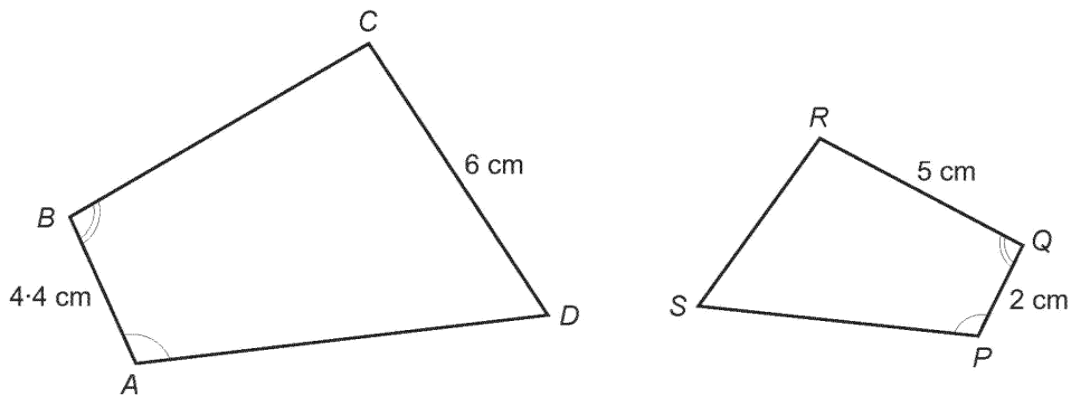
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$x =$ cm

9) The diagram shows two similar quadrilaterals, $ABCD$ and $PQRS$.



Diagrams not drawn to scale

(a) Calculate the length BC . [2]

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(b) Calculate the length RS . [2]

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