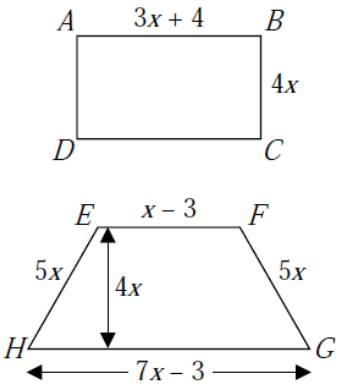
1 *ABCD* is a rectangle.
EFGH is a trapezium.



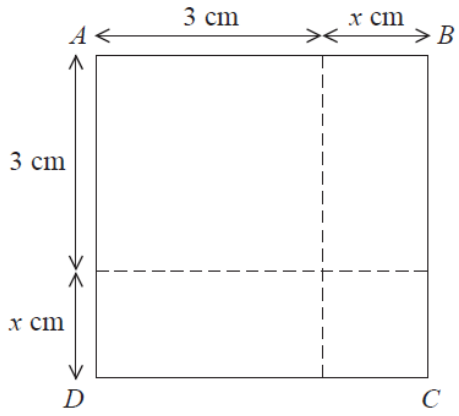
All measurements are in centimetres.
The perimeters of these two shapes are the same.

Work out the area of the rectangle.

..... cm^2

(Total for Question is 5 marks)

2

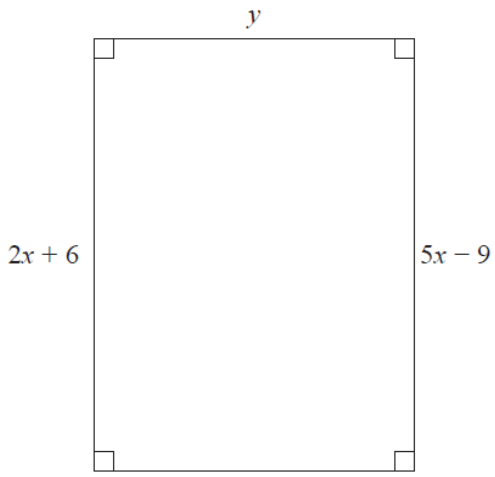


The area of square $ABCD$ is 10 cm^2.

Show that $x^2 + 6x = 1$

(Total for Question is 3 marks)

3 Here is a rectangle.



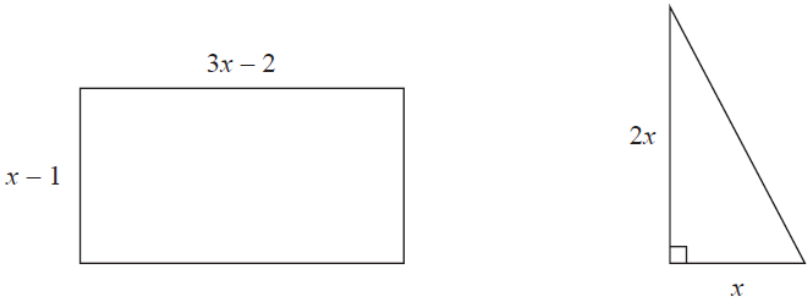
All measurements are in centimetres.

The area of the rectangle is 48 cm^2.

Show that $y = 3$

(Total for Question is 4 marks)

4 Here is a rectangle and a right-angled triangle.



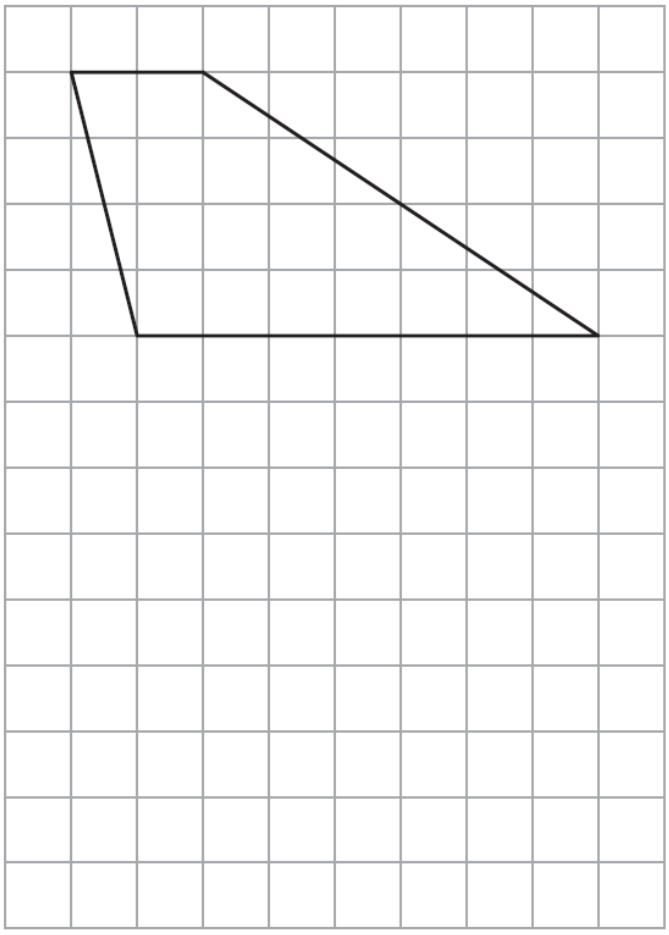
All measurements are in centimetres.
The area of the rectangle is greater than the area of the triangle.

Find the set of possible values of x.

.....

(Total for Question is 5 marks)

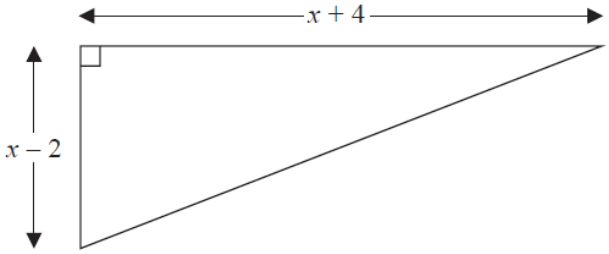
5 Here is a trapezium drawn on a centimetre grid.



On the grid, draw a triangle equal in area to this trapezium.

(Total for Question is 2 marks)

6 The diagram shows a right-angled triangle.



All the measurements are in centimetres.

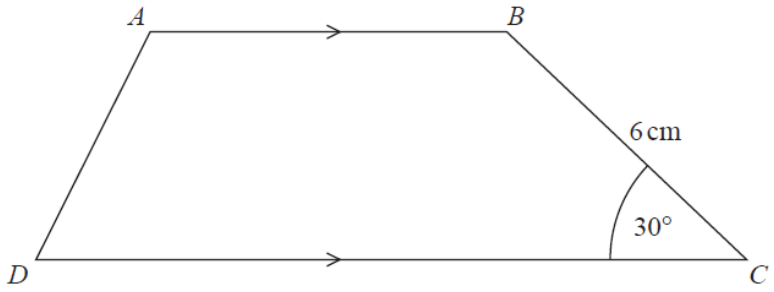
The area of the triangle is 27.5 cm^2

Work out the length of the shortest side of the triangle.
You must show all your working.

..... cm

(Total for Question is 4 marks)

7 Here is trapezium $ABCD$.



The area of the trapezium is $66\,\text{cm}^2$

the length of AB : the length of $CD = 2 : 3$

Find the length of AB.

..... cm

(Total for Question is 5 marks)