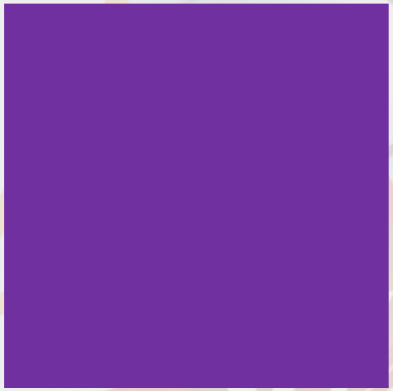
Step 5

Area of Rectangles

In focus

All these rectangles have an area of 36cm^2.

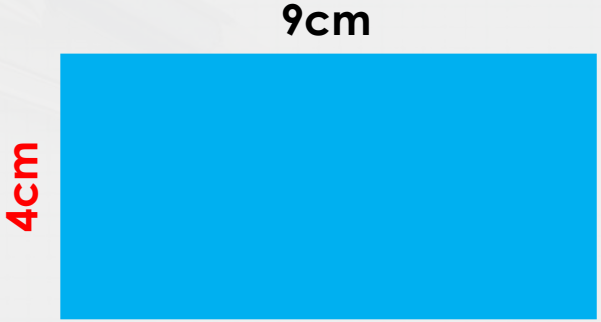


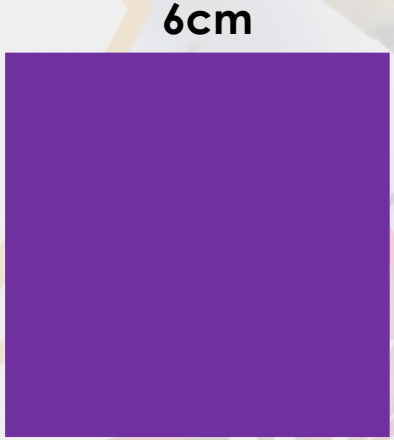
Find the missing lengths.

Y5

In focus

All these rectangles have an area of 36cm².



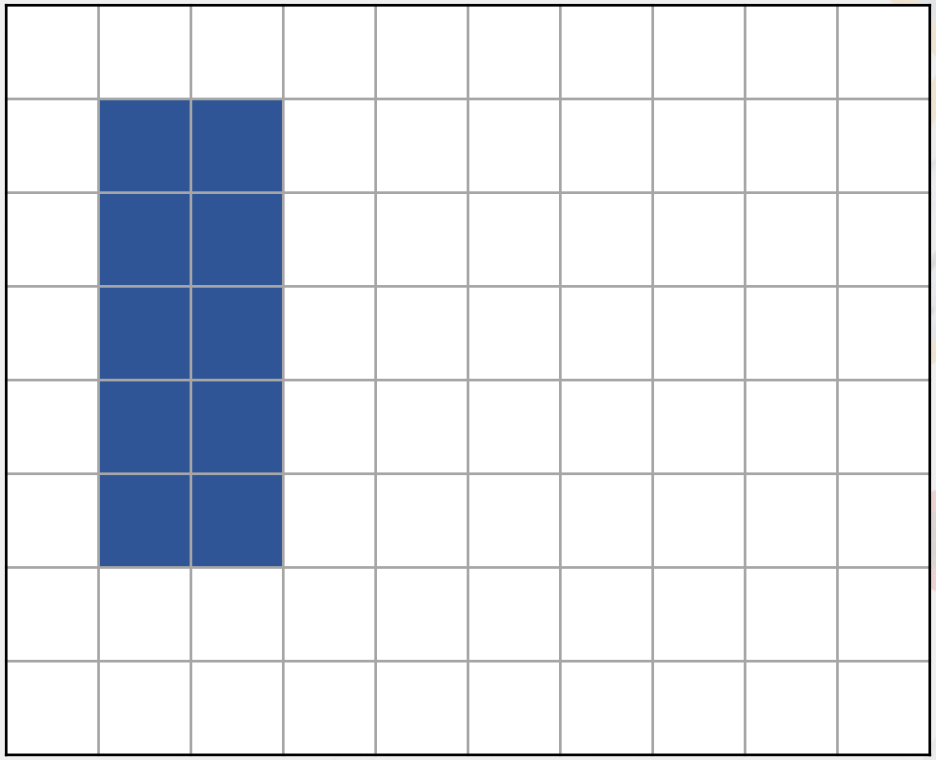


Find the missing lengths.

Y5

Varied Fluency 1

Complete the shape so that the rectangle has an area of 40cm^2.



Y5

Varied Fluency 1

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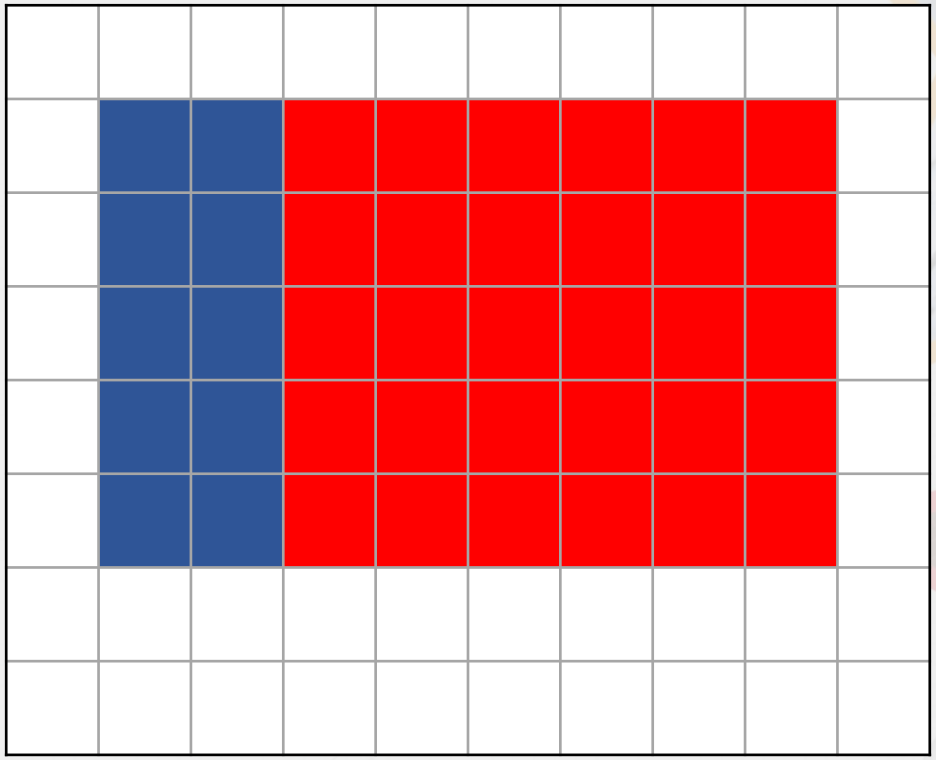
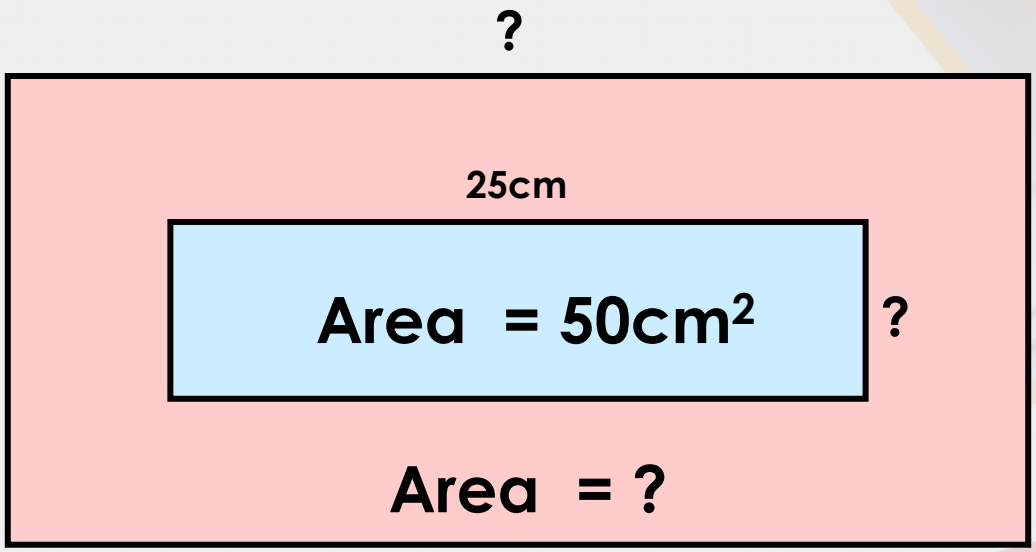


5cm x 8cm = 40cm²

Y5

Problem Solving 1

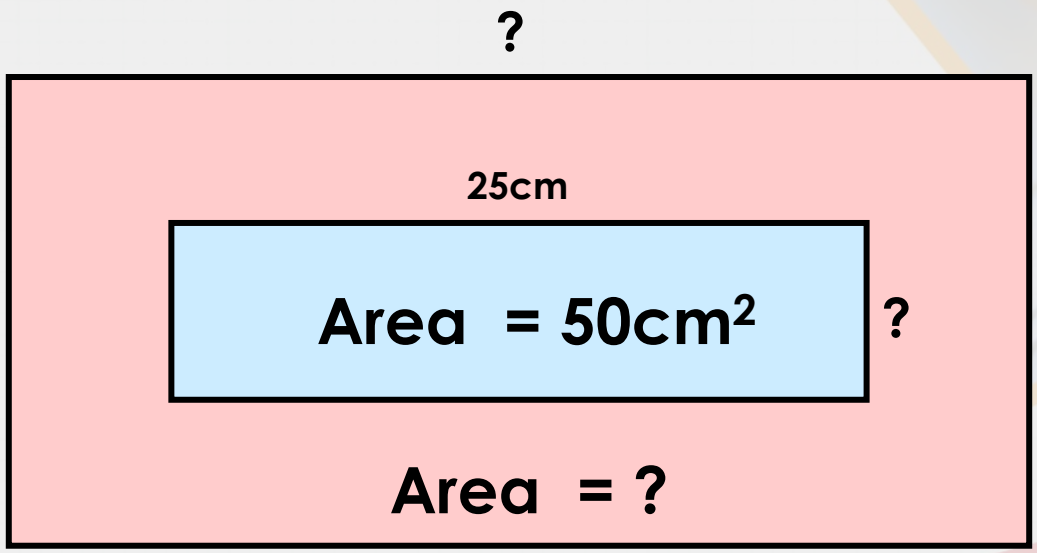
Using the information, calculate the area of the larger rectangle.



The larger rectangle has sides that are twice as long as the smaller one.

Problem Solving 1

Using the information, calculate the area of the larger rectangle.

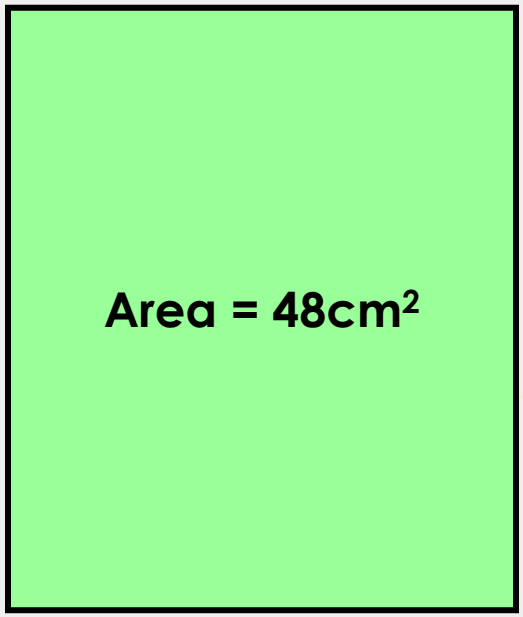


The larger rectangle has sides that are twice as long as the smaller one.

The smaller rectangle has sides of 25cm x 2cm.
The larger rectangle has sides of 50cm x 4cm.
Area of larger rectangle = 200cm².

Problem Solving 2

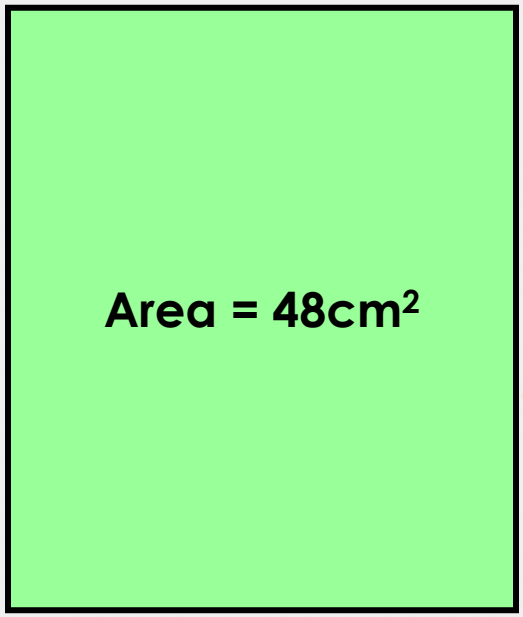
This rectangle has an area of 48cm^2. What could the dimensions be? Include a range of possible answers.



Y5

Problem Solving 2

This rectangle has an area of 48cm^2. What could the dimensions be? Include a range of possible answers.



Various answers, for example:
8cm x 6cm, 24cm x 2cm, 12cm x 4cm

Y5

Max says,

The area of this rectangle is 36cm².

Explain Max's mistake.

Max says,

The area of this rectangle is 36cm².

Explain Max's mistake.
Max has realised that the shape is a square, but…

Max says,

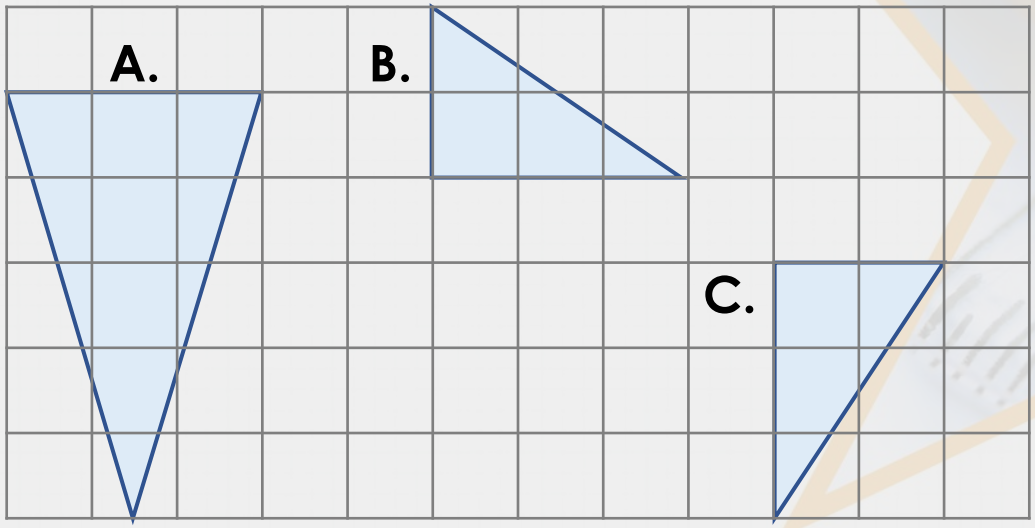
The area of this rectangle is $36cm^2$.

Explain Max's mistake.

Max has realised that the shape is a square, but he has added together all the sides instead of multiplying one side by the other. The correct answer is 9cm x 9cm = $81cm^2$.

Problem Solving 1

Here are three triangles. Each square equals 1cm².



Create three questions about the area of the triangles. Remember to include answers.

Problem Solving 1

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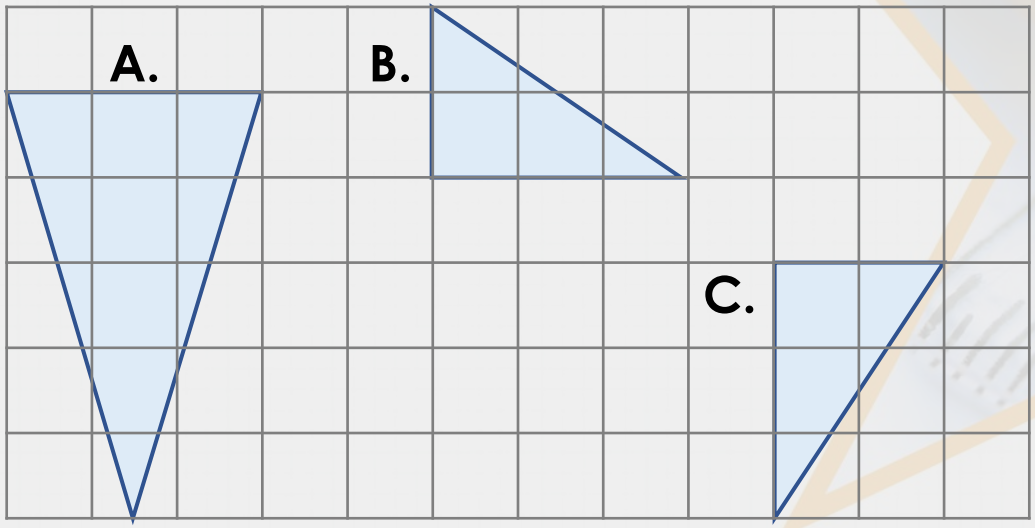


Create three questions about the area of the triangles. Remember to include answers.

Various answers, for example:

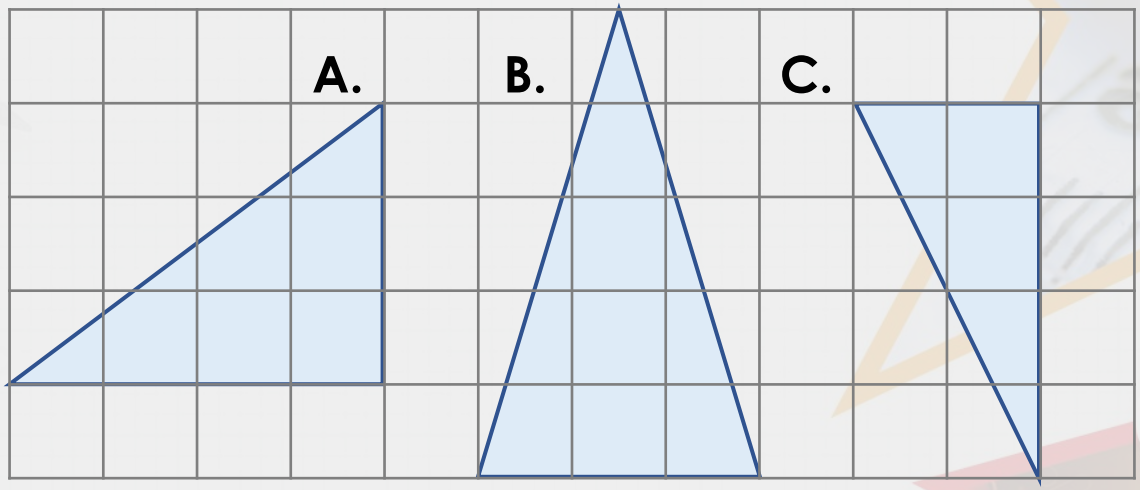
Which triangles have the same area? (B and C)

Which triangle has the largest area? (A)

Which triangles have a combined area of 10.5cm²? (A and B *or* A and C)

Reasoning 1

Seth has worked out the area of these triangles, however he's got them all wrong!
Each square = 1cm².



Area = 12cm² Area = 15cm² Area = 8cm²

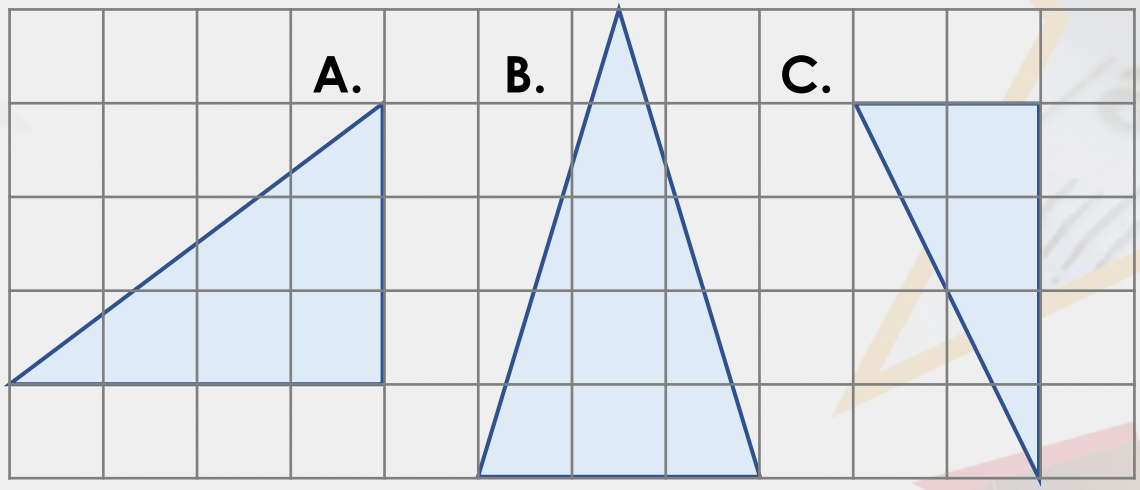
Correct and explain his mistakes.

Seth has calculated the area of the rectangles but has not halved it to get the area of the triangles.

Y6

Reasoning 1

Seth has worked out the area of these triangles, however he's got them all wrong!
Each square = 1cm².



Area = 12cm² Area = 15cm² Area = 8cm²

Area = 6cm² Area = 7.5cm² Area = 4cm²

Correct and explain his mistakes.

Seth has calculated the area of the rectangles but has not halved it to get the area of the triangles.

Y6

Light Bulb Challange

Kiran is drawing a triangle.

She says,

My triangle has an area of 14cm^2.

Use squared paper to draw triangles with the same area as Kiran's.

Light Bulb Challange

Kiran is drawing a triangle.

She says,

My triangle has an area of 14cm^2.

Use squared paper to draw triangles with the same area as Kiran's.

Various answers. Accept any triangle or triangles drawn with an accurate area of 14cm^2.