FLUENCY 1

Caleb is creating a fireplace.

It must be rectangular and have an area of 36m².

How many different ways could he create the fireplace?

AREA = _____ x _____

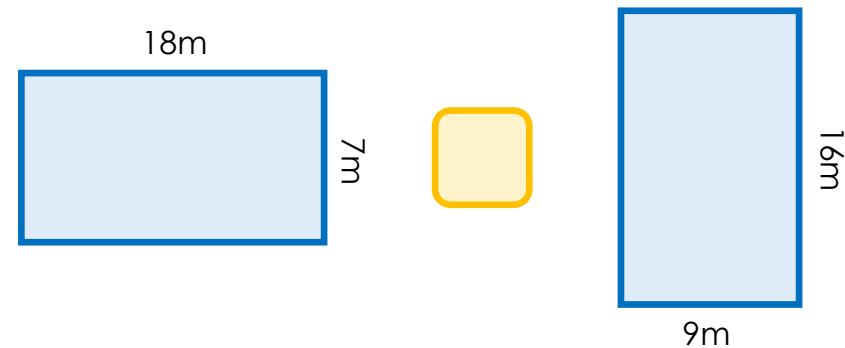## FLUENCY 2

A swimming pool measures 25m by 50m.

There is a 5m border around the pool for safety.

What is the total area that the swimming pool and safety area occupies?

FLUENCY 3

Greater than or less than?

18m

7m

16m

9m

FLUENCY 4

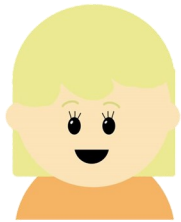**Miss Jones wants to sit her pupils in groups. Each group would take up a space measuring 2m by 3m.**

If Mrs Jones' classroom measures 7m by 10m, how many groups will she be able to have?

FLUENCY TASKS

REASONING TASKS

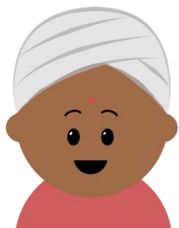## REASONING 1

True or False?

> The area of a rectangle can never be a prime number.

Explain your reasoning using examples!

REASONING 2

Ranjit is investigating the rectangles he can draw with an area of 100cm².
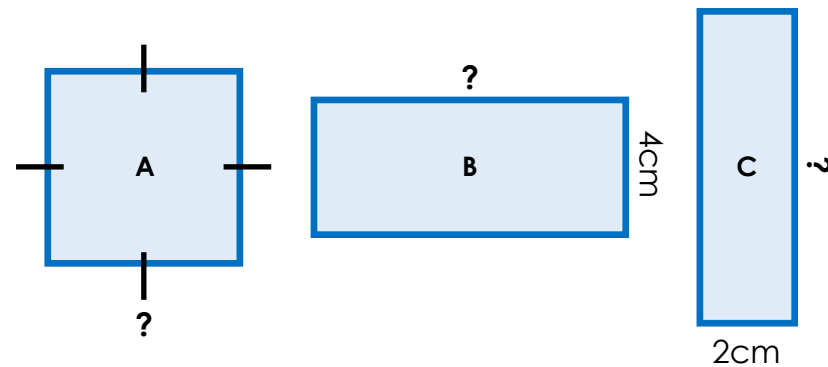
> I can draw 5 different rectangles.

Do you agree or disagree?

Explain your reasoning!
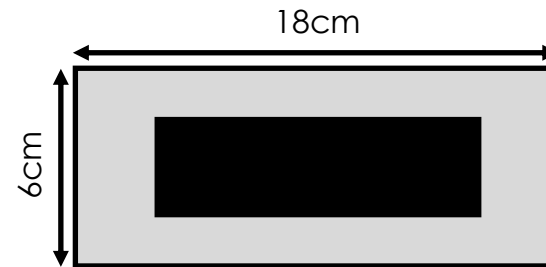
REASONING 3

Each shape has an area of 64cm².

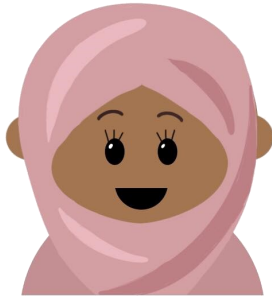**Is it possible to find the missing lengths? Prove it!**

A

?

B   ?   4cm

C   ?   2cm

REASONING 4

The black shape is 3 times smaller than the grey shape.

18cm

6cm

Asha says: "The area of the grey shape is 108 cm²."

Is she correct? Convince Me!

PROBLEM SOLVING TASKS

PROBLEM SOLVING 1

Asha is building a doll's house.

She wants the following rooms to be in the house:

> **Lounge - Area of 168cm^2**
>
> **Kitchen - Area of 96cm^2**
>
> **Bathroom - Area of 96cm^2**
>
> **Bedroom - Area of 216cm^2**
>
> **Dining Room - Area of 144cm^2**

The house will only have one storey.

Each of the rooms must be square or rectangular.

Draw a floor plan to show what Asha's doll's house could look like.