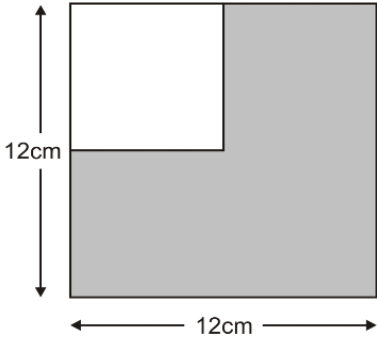**Objective:** Recognise when it is possible to use formulae for the area

Year 6 Task:

A white square is painted in one corner of a grey square.

Each side of the white square is **half** the length of a side of the grey square.

12cm

12cm

Not actual size

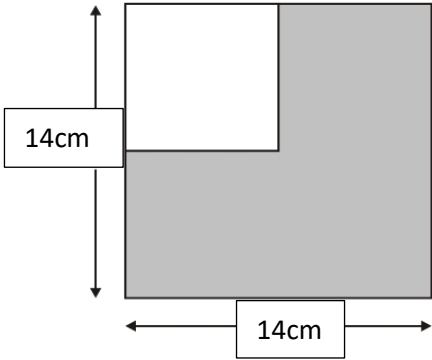What is the **area** of the grey section?

KS2 SATs question

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Worked example

Area of complete grey square =

$$12 \times 12 = 144 \text{ cm}^2$$

Half of $12 = 6$

Area of white square =

$$6 \times 6 = 36 \text{ cm}^2$$

144 cm^2	$-$	36 cm^2	$=$	108 cm^2
↑		↑		↑
Area of complete grey square		Area of white Square		Area of the grey Section.

Variation

A white square is painted in one corner of a grey square.

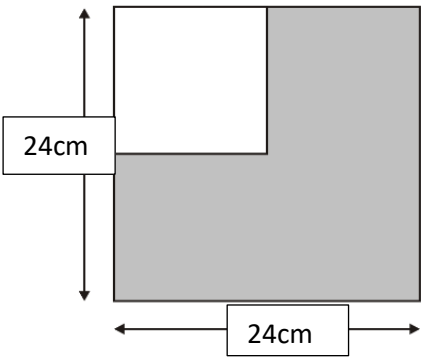Each side of the white square is **half** the length of a side of the grey square.

14cm

14cm

Not actual size

What is the **area** of the grey section?

Answer: 147cm^2

A white square is painted in one corner of a grey square.

Each side of the white square is **half** the length of a side of the grey square.

24cm

24cm

Not actual size

What is the **area** of the grey section?

Answer: 432cm^2