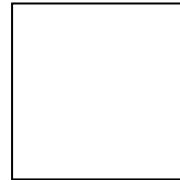
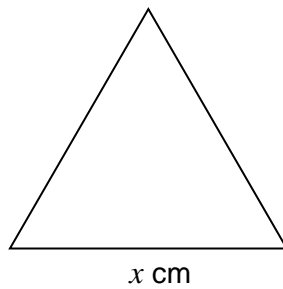


# Topic Test 1 (20 minutes)

## Perimeter and area - Higher

- 1 The diagram shows an equilateral triangle and a square.  
Each side of the square is 1.5 cm shorter than each side of the triangle.



Not drawn accurately

The perimeter of the triangle is equal to the perimeter of the square.

Work out the value of  $x$ .

**[3 marks]**

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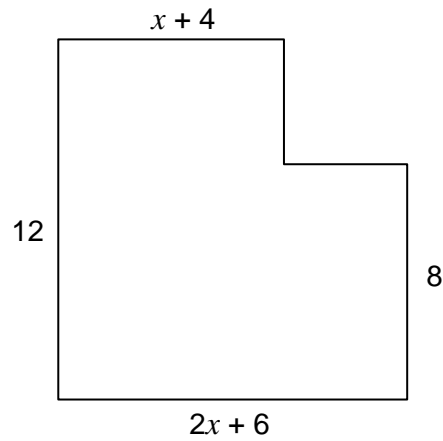
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Answer \_\_\_\_\_ cm



- 3 This shape is made from rectangles.  
All measurements are in cm



Not drawn accurately

Work out an expression, in terms of  $x$ , for the area of the shape.  
Give your answer in its simplest form.

**[3 marks]**

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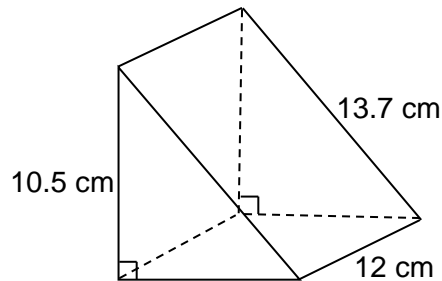
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Answer \_\_\_\_\_  $\text{cm}^2$

4 The diagram shows a piece of cheese in the shape of a triangular prism.



Not drawn accurately

4 (a) Work out the area of cling film needed to cover the cheese.

[5 marks]

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Answer \_\_\_\_\_ cm<sup>2</sup>

4 (b) Is your answer likely to be accurate for the area of cling film used?

Give a reason for your decision.

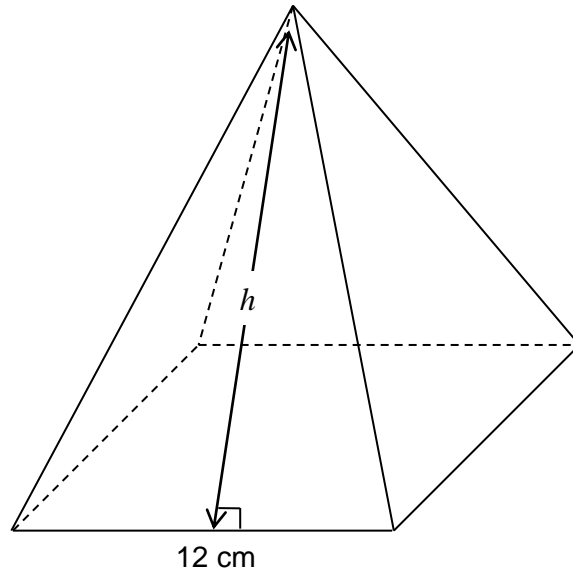
[1 mark]

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Answer \_\_\_\_\_

- 5 The apex of this pyramid is directly above the centre of the square base.  
The total surface area is  $504 \text{ cm}^2$



Not drawn accurately

Work out the perpendicular height,  $h$  of one of the triangular faces.

[3 marks]

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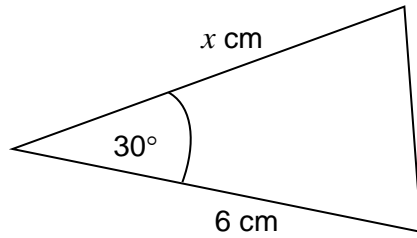
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Answer \_\_\_\_\_  $\text{cm}^2$

6 The area of the triangle is  $15 \text{ cm}^2$



Not drawn accurately

Work the value of  $x$ .

[2 marks]

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Answer \_\_\_\_\_ cm