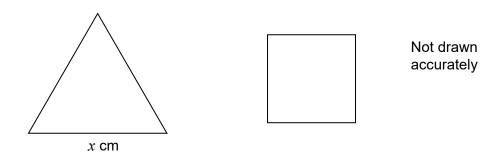


## Topic Test 1 (20 minutes)

## Perimeter and area - Higher

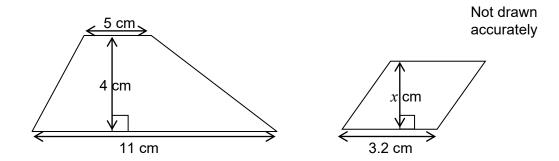
1	The diagram shows an equilateral triangle and a square.
	Each side of the square is 1.5 cm shorter than each side of the triangle



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

Work out the value of $x$ .	[3 marks]
	[3 marks]
Answer	cm

2

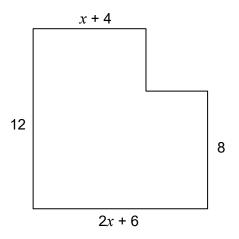


The area of the trapezium is four times the area of the parallelogram.

Work out the value of <i>x</i> .	[3 marks]
	<b>2</b>
Answer	

This shape is made from rectangles.

All measurements are in cm



Not drawn accurately

 $cm^{2}$ 

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

,	,		[3 marks]

Answer

accurately 13.7 cm 10.5 cm 12 cm 4 (a) Work out the area of cling film needed to cover the cheese. [5 marks] Answer  $cm^2$ 4 (b) Is your answer likely to be accurate for the area of cling film used? Give a reason for your decision. [1 mark] Answer

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

Not drawn

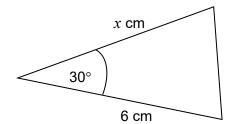
4

5 The apex of this pyramid is directly above the centre of the square base. The total surface area is 504 cm<sup>2</sup> Not drawn accurately 12 cm Work out the perpendicular height, h of one of the triangular faces. [3 marks]

Answer

 $\,\mathrm{cm^2}$ 

6 The area of the triangle is 15 cm<sup>2</sup>



Not drawn accurately

Work the value of <i>x</i> .	[2 marks]
Answer	cm