



THIRD SPACE
LEARNING

GCSE Exam Questions

Area of Compound Shapes |
Geometry & Measure

GCSE Exam Questions: Area of Compound Shapes

1) The diagram shows a compound shape.

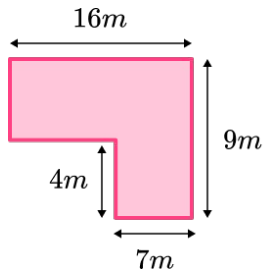


Diagram not drawn to scale

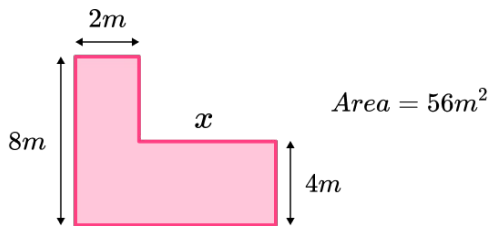
(a) Work out the area of the shape.

(3)

(b) What is the area of the shape in square centimetres?

(2)
(4 marks)

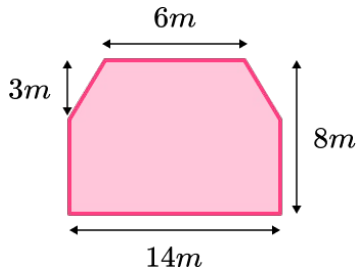
2) Calculate the perimeter of the shape below.



(5 marks)

GCSE Exam Questions: Area of Compound Shapes

- 3) A farmer owns the lamb enclosure shown below. Each lamb costs approximately £75 and the farmer estimates that each lamb requires a minimum of 2 square metres to graze freely.



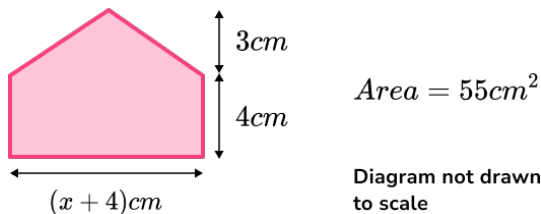
- (a) What is the maximum number of lambs that could fit on the field?

(4)

- (b) How much would it cost to acquire the lambs in the enclosure?

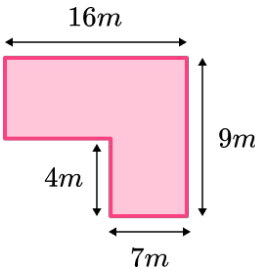
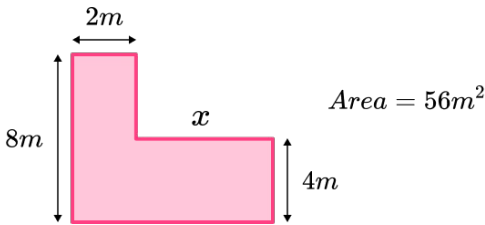
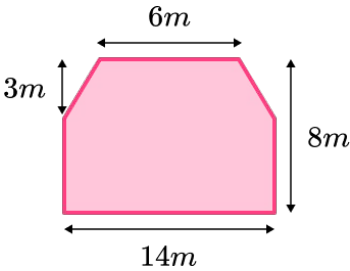
(2)
(6 marks)

- 4) Calculate the value of x in the diagram below.

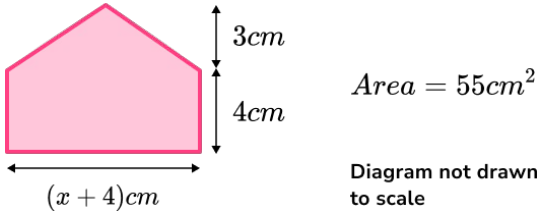


(4 marks)

GCSE Exam Questions: Area of Compound Shapes Answers

	Question	Answer	Marks
1)	<p>The diagram shows a compound shape.</p>  <p style="text-align: right;">Diagram not drawn to scale</p>		
(a)	Work out the area of the shape.	<p>(a) 7×4 or 28 seen</p> <p>16×5 or 80 seen</p> <p>$108m^2$</p>	(1) (1) (1)
(b)	What is the area of the shape in square centimetres?	<p>(b) 108×10000</p> <p>$1080000cm^2$</p>	(1) (1)
2)	<p>Calculate the perimeter of the shape below.</p> 	<p>$8 \times 2 = 16$</p> <p>$56 - 16$ or 40</p> <p>$40 \div 4$</p> <p>$x = 10$</p> <p>$P = 2 \times (8 + 12) = 40m$</p>	(1) (1) (1) (1) (1)
3) (a)	<p>A farmer owns the lamb enclosure shown below. Each lamb costs approximately £75 and the farmer estimates that each lamb requires a minimum of 2 square metres to graze freely. What is the maximum number of lambs that could fit on the field?</p> 	<p>(a) $14 \times 5 = 70$</p> <p>$\frac{14 + 6}{2} \times 3$ or 30 seen</p> <p>Total Area = $100m^2$</p> <p>$100 \div 2 = 50$ lambs</p>	(1) (1) (1) (1)
(b)	How much would it cost to acquire the lambs in the enclosure?	<p>(b) 75×50</p> <p>£3750</p>	(1) (1)

GCSE Exam Questions: Area of Compound Shapes Answers

	Question	Answer	Marks
4)	<p>Calculate the value of x in the diagram on the right.</p>  <p style="text-align: right;">$Area = 55cm^2$</p> <p style="text-align: right;">Diagram not drawn to scale</p>	$4(x + 4) \text{ or } \frac{3(x + 4)}{2} \text{ seen}$ $4x + 16 + \frac{3x + 12}{2} = 55 \text{ oe}$ $11x + 44 = 66 \text{ oe}$ $x = 6cm$	<p style="text-align: center;">(1)</p> <p style="text-align: center;">(1)</p> <p style="text-align: center;">(1)</p> <p style="text-align: center;">(1)</p>

Where to go next?

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