



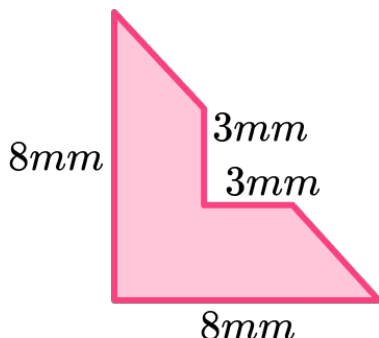
THIRD SPACE
LEARNING

GCSE Exam Questions

How to Work Out Area |
Geometry & Measure

GCSE Exam Questions: How to Work Out Area

- 1) Work out the area of the hexagon below:



(3 marks)

- 2) (a) The allowed occupancy of room can be calculated using the following information:

Use of room	Required m ² /person
Standing	0.3
Dancing	0.5
Seated	1.2

Lucy is planning a school disco. The hall measures $16m$ by $9m$.

How many people can the hall accommodate for dancing at the disco?

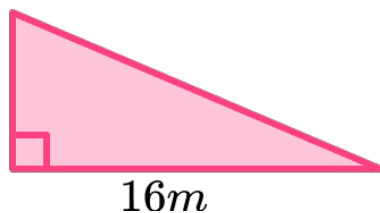
(2)

- (b) Lucy pays £100 to hire the hall. If Lucy sells the maximum number of tickets allowed for £3 each, how much profit will she make?

(2)
(4 marks)

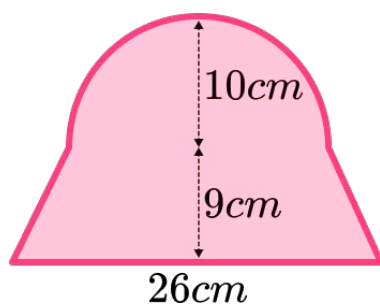
GCSE Exam Questions: How to Work Out Area

- 3) The area of this triangle is $40m^2$. Work out the height of the triangle.



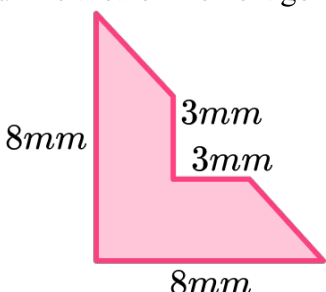
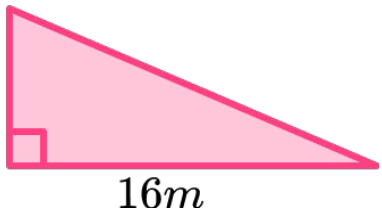
(3 marks)

- 4) Work out the area of this shape:

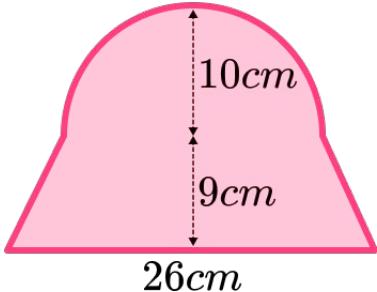


(5 marks)

GCSE Exam Questions: How to Work Out Area Answers

	Question	Answer	Marks								
1)	<p>Work out the area of the hexagon below:</p> 	<p>Big triangle:</p> $\frac{1}{2} \times 8 \times 8 = 32mm^2$ <p>Small triangle:</p> $\frac{1}{2} \times 3 \times 3 = 4.5mm^2$ $32 - 4.5 = 27.5mm^2$	<p>(1)</p> <p>(1)</p> <p>(1)</p>								
2) (a)	<p>The allowed occupancy of room can be calculated using the following information:</p> <table border="1" data-bbox="253 781 732 1039"><thead><tr><th>Use of room</th><th>Required m²/person</th></tr></thead><tbody><tr><td>Standing</td><td>0.3</td></tr><tr><td>Dancing</td><td>0.5</td></tr><tr><td>Seated</td><td>1.2</td></tr></tbody></table> <p>Lucy is planning a school disco. The hall measures 16m by 9m. How many people can the hall accommodate for dancing at the disco?</p>	Use of room	Required m ² /person	Standing	0.3	Dancing	0.5	Seated	1.2	<p>(a) $16 \times 9 = 144$</p> $144 \div 0.5 = 288$	<p>(1)</p> <p>(1)</p>
Use of room	Required m ² /person										
Standing	0.3										
Dancing	0.5										
Seated	1.2										
(b)	<p>Lucy pays £100 to hire the hall. If Lucy sells the maximum number of tickets allowed for £3 each, how much profit will she make?</p>	<p>(b) $288 \times 3 = \text{£}864$</p> $\text{£}864 - \text{£}100 = \text{£}764$	<p>(1)</p> <p>(1)</p>								
3)	<p>The area of this triangle is 40m². Work out the height of the triangle.</p> 	$\frac{1}{2} \times 16 \times h = 40$ $8h = 40$ $h = 5m$	<p>(1)</p> <p>(1)</p> <p>(1)</p>								

GCSE Exam Questions: How to Work Out Area Answers

	Question	Answer	Marks
4)	<p>Work out the area of this shape</p> 	<p>Top of trapezium = $20cm$</p> <p>Area of trapezium:</p> $\frac{1}{2}(20 + 26) \times 9 = 207cm^2$ <p>Area of semi-circle:</p> $\frac{\pi \times 10^2}{2}$ <p>Area of semi-circle:</p> $157.08cm^2$ <p>Total area:</p> $207 + 157.08 = 364cm^2$	<p>(1)</p> <p>(1)</p> <p>(1)</p> <p>(1)</p> <p>(1)</p>

Where to go next?

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