

GCSE Exam Questions

Area of a Quadrilateral | Geometry & Measure



GCSE Exam Questions: Area of a Quadrilateral

1) (a) Ann's patio is 4m long by 3.5m wide. Calculate the area of the patio.

(1)

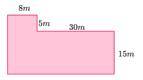
(b) Patio slabs are 40*cm* x 70*cm*. They come in packs of 8. Each pack costs £22.50. How much will it cost Ann to buy enough new slabs to cover her patio?

(4)

(5 marks)

(2)

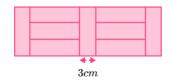
2) (a) Daniel is going to put some sheep in a field. Each sheep requires $40m^2$ for grazing. How many sheep can Daniel have in his field?



(b) Goats require 35 m2 for grazing. How many more goats than sheep could Daniel keep in the same field?

(2) (4 marks)

3) The pattern below is made from 9 identical rectangles. Find the total area of the pattern.



(4 marks)



GCSE Exam Questions: Area of a Quadrilateral Answers

	Question	Ans	Answer	
1) (a)	Ann's patio is $4m$ long by $3.5 m$ wide. Calculate the area of the patio.	(a)	$4\times3.5=14m^2$	(1)
(b)	Patio slabs are 40 cm × 70 cm. They come in packs of 8. Each pack costs £22.50. How much will it cost Ann to buy enough new slabs to cover her patio?	(b)	Area of each tile: $0.4 \times 0.7 = 0.28$ cm ² Number of tiles: $14 \div 0.28 = 50$ Number of packs: $50 \div 8 = 6.25$ (7 packs) Total cost: $7 \times 22.5 = £157.50$	(1) (1) (1) (1)
2) (a)	Daniel is going to put some sheep in a field. Each sheep requires 40 <i>m</i> 2 for grazing. How many sheep can Daniel have in his field? 8 <i>m</i> 5 <i>m</i> 30 <i>m</i>	(a)	$8 \times 5 = 40$ $38 \times 15 = 570$ $570 + 40 = 610 m^2$ $610 \div 40 = 15.25$ He can have 15 sheep.	(1) (1) (1) (1)
(b)	Goats require $35 m^2$ for grazing. How many more goats than sheep could Daniel keep in the same field?	(b)	$610 \div 35 = 17.42857$ (17 goats) 17 - 15 = 2 goats	(1) (1)
3)	The pattern below is made from 9 identical rectangles. Find the total area of the pattern.	(b)	Height of one tile: $3 \times 3 = 9 \ cm$ Area of each tile: $3 \times 9 = 27 \ cm^2$ Total area: $9 \times 27 = 243$ cm^2	(1) (1) (1) (1)

Where to go next?

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