



THIRD SPACE
LEARNING

GCSE Exam Questions

Population Density | Ratio &
Proportion

GCSE Exam Questions: Population Density

- 1) A town has a population of 210,000 people.
The population density is 3,500 people per km^2 .
Calculate the area of the town.

----- km^2
(2 marks)

- 2) (a) A country has a population density of 4.27×10^3 .
It has a land area of 2.38×10^5 .
Calculate the population of the country.
Give your answer in standard form correct to 3 significant figures.

----- people
(3)

- (b) Give your answer to part (a) as an ordinary number.

----- people
(1)
(4 marks)

GCSE Exam Questions: Population Density

- 3) Here is some information about the populations and areas of 3 different towns.

Country	Population	Area(km^2)
A	98 000	350
B	130 000	420
C	104 500	521

Which town has the lowest population density?

You must show your workings.

(3 marks)

GCSE Exam Questions: Population Density Answers

	Question	Answer	Marks												
1)	A town has a population of 210 000 people. The population density is 3500 people per km^2 . Calculate the area of the town.	$210\,000 \div 3500$ Area = $60\, km^2$	(1) (1)												
2) (a)	A country has a population density of 4.27×10^3 . It has a land area of 2.38×10^5 . Calculate the population of the country. Give your answer in standard form correct to 3 significant figures.	(a) $(4.27 \times 10^3) \times (2.38 \times 10^5)$ =1,016,260,000 = 1.02×10^9 people	(1) (1) (1)												
(b)	Give your answer to part (a) as an ordinary number.	(b) 1,020,000,000	(1)												
3)	Here is some information about the populations and areas of 3 different towns. <table border="1"><thead><tr><th>Country</th><th>Population</th><th>Area(km^2)</th></tr></thead><tbody><tr><td>A</td><td>98 000</td><td>350</td></tr><tr><td>B</td><td>130 000</td><td>420</td></tr><tr><td>C</td><td>104 500</td><td>521</td></tr></tbody></table> Which town has the lowest population density? You must show your workings.	Country	Population	Area(km^2)	A	98 000	350	B	130 000	420	C	104 500	521	A: $98000 \div 350 = 280$ or B: $130000 \div 420 = 309.52 \dots$ or C: $104500 \div 521 = 200.57 \dots$ 280 and 309.52... and 200.57... Town C has the lowest population density	(1) (1) (1)
Country	Population	Area(km^2)													
A	98 000	350													
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Where to go next?

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