



THIRD SPACE
LEARNING

GCSE Exam Questions

Multiplying and Dividing
Standard Form | Number

GCSE Exam Questions: Multiplying and Dividing Standard Form

- 1) Work out $(5 \times 10^3) \times (3 \times 10^2)$.

Circle the correct answer.

1.5×10^5 1.5×10^6 1.5×10^7 1.5×10^8

(1 mark)

- 2) Work out:

$$\frac{9.6 \times 10^7}{3.2 \times 10^3}$$

Give your answer in standard form.

(2 marks)

- 3) The side of a square is 1.2×10^3 m.

Calculate the area of the square.

Give your answer in standard form.

----- m^2
(2 marks)

GCSE Exam Questions: Multiplying and Dividing Standard Form

4) Here are the radii of some planets:

Planet	Radius (km)
Earth	6.4×10^3
Jupiter	7.0×10^4
Mars	3.4×10^3
Neptune	2.5×10^4
Saturn	5.8×10^4

(a) Which planet has the smallest radius?

(1)

(b) Work out the circumference of the Earth.

Write your answer in standard form correct to 3 significant figures.

----- km
(3)

(c) How many times bigger is Jupiter's radius than the radius of Mars?

Give your answer to the nearest whole number.

(2)

(6 marks)

GCSE Exam Questions: Multiplying and Dividing Standard Form Answers

	Question	Answer	Marks												
1)	Work out $(5 \times 10^3) \times (3 \times 10^2)$. Circle the correct answer. 1.5×10^5 1.5×10^6 1.5×10^7 1.5×10^8	1.5×10^6	(1)												
2)	Work out: $\frac{9.6 \times 10^7}{3.2 \times 10^3}$ Give your answer in standard form.	3 or 30 000 3×10^4	(1) (1)												
3)	The side of a square is 1.2×10^3m . Calculate the area of the square. Give your answer in standard form.	$(1.2 \times 10^3)^2$ or 1.44 1.44×10^6	(1) (1)												
4)	Here are the radii of some planets: <table border="1"><thead><tr><th>Planet</th><th>Radius (km)</th></tr></thead><tbody><tr><td>Earth</td><td>6.4×10^3</td></tr><tr><td>Jupiter</td><td>7.0×10^4</td></tr><tr><td>Mars</td><td>3.4×10^3</td></tr><tr><td>Neptune</td><td>2.5×10^4</td></tr><tr><td>Saturn</td><td>5.8×10^4</td></tr></tbody></table>	Planet	Radius (km)	Earth	6.4×10^3	Jupiter	7.0×10^4	Mars	3.4×10^3	Neptune	2.5×10^4	Saturn	5.8×10^4		
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(a)	Which planet has the smallest radius?	(a) Mars	(1)												
(b)	Work out the circumference of the Earth. Write your answer in standard form correct to 3 significant figures.	(b) Diameter: $2 \times (6.4 \times 10^3) = 12800$ Circumference: $\pi \times 12800$ 4.02×10^4	(1) (1) (1)												
(c)	How many times bigger is Jupiter’s radius than the radius of Mars? Give your answer to the nearest whole number.	(c) $(7.0 \times 10^4) \div (3.4 \times 10^3)$ $= 20.58...$ 21 times	(1) (1)												

Where to go next?

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