



THIRD SPACE
LEARNING

GCSE Exam Questions

Multiplying and Dividing Indices
| Algebra

GCSE Exam Questions: Multiplying and Dividing Indices

1) (a) Simplify $\frac{4y^4}{y^{-5}}$

(1)

(b) Simplify $5uw^3 \times 3u^4w$

(2)
(3 marks)

2) (a) Simplify $6y \times 4y$

(1)

(b) Simplify $\frac{d^7}{d^2}$

(1)
(2 marks)

3) (a) Simplify $\frac{x^4 \times x^{-2}}{x^6}$

(2)

(b) Simplify $\frac{63x^5y^2}{7x^9y}$

(2)
(4 marks)

GCSE Exam Questions: Multiplying and Dividing Indices

- 4) Donte is asked to work out the value of this calculation: $10^3 \times 10^2$.
He writes down 1,000,000 as his answer. He is wrong.

Identify his mistake.

(1 mark)

GCSE Exam Questions: Multiplying and Dividing Indices Answers

	Question	Answer	Marks
1) (a)	Simplify $\frac{4y^4}{y^{-5}}$	(a) $4y^9$	(1)
(b)	Simplify $5uw^3 \times 3u^4w$	(b) $15u^5$ or $15w^4$ seen $15u^5w^4$	(1) (1)
2) (a)	Simplify $6y \times 4y$	(a) $24y^2$	(1)
(b)	Simplify $\frac{d^7}{d^2}$	(b) d^5	(1)
3) (a)	Simplify $\frac{x^4 \times x^{-2}}{x^6}$	(a) $x^2 \div x^6$ oe x^{-4}	(1) (1)
(b)	Simplify $\frac{63x^5y^2}{7x^9y}$	(b) $9x^{-4}$ or $9y$ seen $9x^{-4}y$	(1) (1)
4)	Donte is asked to work out the value of this calculation: $10^3 \times 10^2$. He writes down 1,000,000 as his answer. He is wrong. Identify his mistake.	$1000 \times 100 = 100,000$ $10^3 \times 10^2 = 10^5$ Donte has an extra zero in his number because he multiplied the indices oe	(1)

Where to go next?

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