



Air maths tuition

Interact, engage and perform

Logarithms - Simultaneous Equations (1)

The image shows a handwritten solution on lined paper, divided into two columns by a vertical green line. The left column contains the following steps:
1. $2 \log_x y = 1$ (1)
2. $xy = 64$ (2)
3. From (1), $\therefore \log_x y^2 = 1$
4. $\therefore y^2 = x$ (3)
5. Sub (3) in (2)
6. $\therefore y^3 = 64$

The right column contains the following steps:
7. $\therefore y = \sqrt[3]{64}$
8. $\therefore y = 4$
9. Sub in (3)
10. $\therefore x = 16$
11. $\therefore x = 16, y = 4$

A blue play button icon is visible in the bottom right corner of the paper.

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