

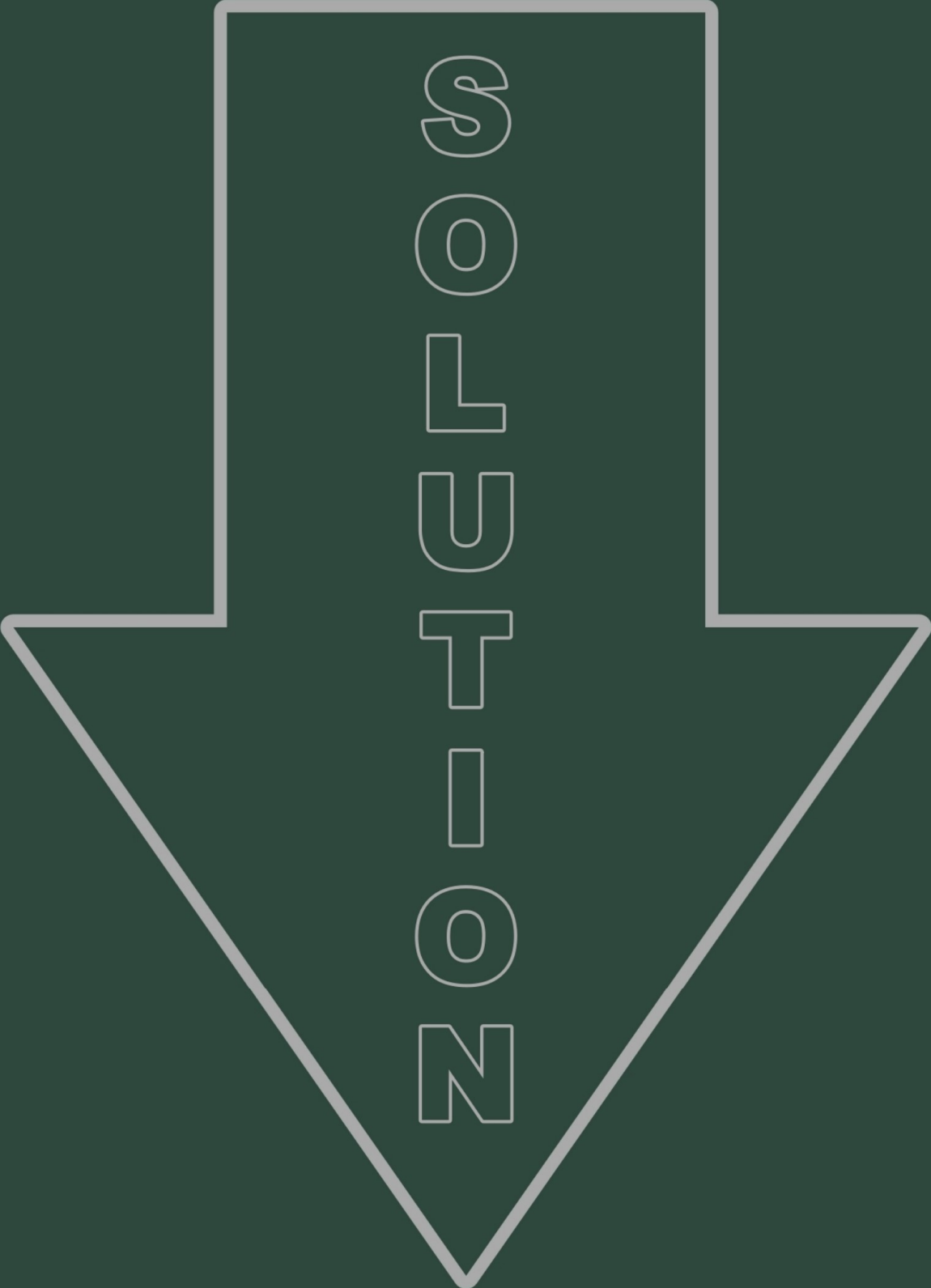
Quel raisonnement

$$\log_4(x) + \log_2(x) = 6$$

pour trouver la valeur de x

(dans \mathbb{R})

?



----- Q U E S T I O N -----

$$\log_4(x) + \log_2(x) = 6$$

$x = ?$ (dans \mathbb{R})

----- R É P O N S E -----

$$\log_4(x) + \log_2(x) = 6$$

2 rappels:

- $\log[b](a) = \log[b^x](a^x)$
- $\log[b](a) + \log[b](c) = \log[b](a \cdot c)$

$$\log_4(x) + \log_4(x^2) = 6$$

$$\log_4(x \cdot x^2) = 6$$

$$\log_4(x^3) = 6$$

$$x^3 = 4^6$$

$$x^3 = 4096$$

$$x = \sqrt[3]{4096}$$

----- résultat final -----

■ $x = 16$