

Questão 53

Se $\log_2 y = -\frac{1}{2} + \frac{2}{3} \log_2 x$, para $x > 0$, então

(A) $y = \frac{\sqrt[3]{x^2}}{\sqrt{2}}$

(B) $y = \sqrt{\frac{x^3}{2}}$

(C) $y = -\frac{1}{\sqrt{2}} + \sqrt[3]{x^2}$

(D) $y = \sqrt{2} \cdot \sqrt[3]{x^2}$

(E) $y = \sqrt{2x^3}$

ALTERNATIVA A

$$\log_2 y = -\frac{1}{2} + \frac{2}{3} \log_2 x$$

$$\log_2 y = -\frac{1}{2} \log_2 2 + \frac{2}{3} \log_2 x$$

$$\log_2 y = \log_2 2^{-\frac{1}{2}} + \frac{2}{3} \log_2 x$$

$$\log_2 y = \log_2 \frac{1}{2^{\frac{1}{2}}} + \log_2 x^{\frac{2}{3}}$$

$$\log_2 y = \log_2 \frac{1}{\sqrt{2}} + \log_2 \sqrt[3]{x^2}$$

$$\log_2 y = \log_2 \frac{\sqrt[3]{x^2}}{\sqrt{2}}$$

$$y = \frac{\sqrt[3]{x^2}}{\sqrt{2}}$$

