

"Radiciação"

1. $\sqrt[3]{8} = \sqrt[3]{2^3} = 2$

$$\begin{array}{r|l} 8 & 2 \\ 4 & 2 \\ 2 & 2 \\ 1 & 2^3 \end{array}$$

2. $\sqrt[5]{-32} = -\sqrt[5]{32} = -\sqrt[5]{2^5} = -2$

$$\begin{array}{r|l} 32 & 2 \\ 16 & 2 \\ 8 & 2 \\ 4 & 2 \\ 2 & 2 \\ 1 & 2^5 \end{array}$$

3. $\sqrt[4]{0} = 0$

zero elevado a qualquer número é igual a zero.

4. $\sqrt{25} = \sqrt{5^2} = 5$

$$\begin{array}{r|l} 25 & 5 \\ 5 & 5 \\ 1 & 5^2 \end{array}$$

5. $-\sqrt{25} = -\sqrt{5^2} = -5$

6. $\pm\sqrt{25} = \pm\sqrt{5^2} = +5; -5$

7. A raiz quadrada positiva é
+5

8. A raiz quadrada negativa é
-5

9. As raízes são +5 e -5

10. $\sqrt[3]{0} = 0$ $\sqrt[3]{-125} = -5$

$\sqrt[6]{1} = 1$ $\sqrt[3]{64} = \sqrt[3]{2^3 \cdot 2^3}$

$\sqrt[4]{81} = 3$ $= 2 \cdot 2 = 4$

$$\begin{array}{r|l} 81 & 3 \\ 27 & 3 \\ 9 & 3 \\ 3 & 3 \\ 1 & 3^4 \end{array}$$

$$\begin{array}{r|l} 125 & 5 \\ 25 & 5 \\ 5 & 5 \\ 1 & 5^3 \end{array}$$

$$\begin{array}{r|l} 64 & 2 \\ 32 & 2 \\ 16 & 2 \\ 8 & 2 \\ 4 & 2 \\ 2 & 2 \\ 1 & 2^6 \end{array} = 2^3 \cdot 2^3$$

$0 + 1 + 3 - 5 - 4 = -5 //$

11. $\sqrt{10 + \sqrt{32 + \sqrt{18 - \sqrt{9 - \sqrt{25}}}}}$

$\sqrt{10 + \sqrt{32 + \sqrt{18 - \sqrt{4}}}}$

$\sqrt{10 + \sqrt{32 + \sqrt{16}}}$

$\sqrt{10 + \sqrt{36}} = \sqrt{10 + 6} = 4 //$ (B)

12. $\sqrt[4]{2401} = \sqrt[4]{7^4} = 7 //$

$$\begin{array}{r|l} 2401 & 7 \\ 343 & 7 \\ 49 & 7 \\ 7 & 7 \\ 1 & 7^4 \end{array}$$