

RADICIAÇÃO

01.

- | | | | |
|-------------------------|--------------------------|-----------------|------------------|
| a) 32 | b) $12\sqrt{6}$ | c) $40\sqrt{5}$ | d) $30\sqrt{30}$ |
| e) $2 \times 0,1 = 0,2$ | f) 0,3 | g) 0,04 | h) 1,2 |
| i) -3 | j) $2 \cdot \sqrt[3]{3}$ | l) 0,3 | m) $9ab^2$ |
| n) $5x^2y^4\sqrt{2}$ | | | |

02.

$$2\sqrt{3} - 5\sqrt{2} + 3\sqrt{3} + 10\sqrt{2} = 5\sqrt{3} + 5\sqrt{2} = 5(\sqrt{3} + \sqrt{2})$$

03.

- a) $7\sqrt{2} + 5\sqrt{3} - 5\sqrt{2} - 6\sqrt{3} = 2\sqrt{2} - \sqrt{3}$
- b) $2 \times 1,41 - 1,73 = 2,82 - 1,73 = 1,09$

04.

- | | |
|---|---|
| a) $\sqrt{77}$ | b) $\sqrt{81} = 9$ |
| c) $\sqrt{6} - \sqrt{10}$ | d) $(\sqrt{2})^2 - (\sqrt{3})^2 = 2 - 3 = -1$ |
| e) $(\sqrt{5} + 1)^2 = (\sqrt{5})^2 + 2 \cdot \sqrt{5} \cdot 1 + 1^2 = 5 + 2\sqrt{5} + 1 = 6 + 2\sqrt{5}$ | |

Obs.: O item e faltou a indicação do quadrado (expoente) no enunciado.

05.

- a) $\frac{1}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$
- b) $\frac{6}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{6\sqrt{3}}{3} = 2\sqrt{3}$
- c) $\frac{\sqrt{3}}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{\sqrt{15}}{5}$
- d) $\frac{1}{3\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{6}$
- e) $\frac{28}{\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{28\sqrt{7}}{7} = 4\sqrt{7}$
- f) $\frac{\sqrt{20}}{\sqrt{5}} = \sqrt{\frac{20}{5}} = \sqrt{4} = 2$

06

O volume $\underline{V}$ de um cubo de aresta $\underline{a}$ é dado por: $V = a^3$

$$V = 1,728 \Rightarrow a^3 = 1,728 \Rightarrow a = \sqrt[3]{1,728} \Rightarrow x = 1,2 \text{ m}$$



07.

$$\ell^2 = 3\,000\,000 \Rightarrow \ell = \sqrt{3\,000\,000} = 1000\sqrt{3} \cong 1000 \cdot 1,73 \cong 1730$$

Opção: A