

Boletín IV Repaso Tema II (Radicales) – Matemáticas 4º

1. Opera y Simplifica

$$a. \frac{\sqrt[3]{e^3 \cdot \sqrt{f^7}} \cdot \sqrt[4]{f^5 \sqrt{e^7} \cdot f^3}}{\sqrt{f^5 \cdot e^4} \cdot \sqrt[3]{e^5 \cdot f^8}}$$

$$c. \frac{\sqrt[4]{\sqrt{a^3 \cdot b^5}} \cdot \sqrt{a^3 \cdot \sqrt{b^3}} \cdot \sqrt[3]{b^5}}{\sqrt{b^3 \cdot a^5} \cdot \sqrt[5]{a^7}}$$

$$b. \frac{\sqrt[3]{\sqrt{x^2} \cdot y^7} \cdot \sqrt[4]{\sqrt{y^3}}}{\sqrt{y^3 \cdot x^4} \cdot \sqrt[3]{y^5} \cdot \sqrt[5]{y^2 \cdot x^9}}$$

2. Factoriza las raíces y extrae aquellos factores que sea posible realizando las operaciones posibles con radicales.

$$a. 3\sqrt{36} - 7\sqrt{49} =$$

$$f. 6\sqrt{32} + 4\sqrt{75} - \sqrt{98} =$$

$$b. 3\sqrt{243} + 6\sqrt{204} - 2\sqrt{147} =$$

$$g. \sqrt[3]{432} - 2 \cdot \sqrt[3]{1024} + 3 \cdot \sqrt[3]{250} =$$

$$c. 5\sqrt{27} + 7\sqrt{8} - 5\sqrt{12} =$$

$$h. \sqrt[5]{96} + 5 \cdot \sqrt[5]{729} - 3 \cdot \sqrt[5]{6250} =$$

$$d. 9\sqrt{3^2 + 4^2} + 4\sqrt{3} - \sqrt{25} =$$

$$i. 3 \cdot \sqrt[4]{48} + \sqrt[3]{81} - 2 \cdot \sqrt[3]{3} =$$

$$e. 6\sqrt{75} - 7\sqrt{48} + 9\sqrt{3} - \sqrt{300} =$$

3. Racionaliza.

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

$$c. \frac{1}{\sqrt[5]{5^{11}}} =$$

$$e. \frac{-2}{\sqrt[5]{5}} =$$

$$b. \frac{7}{\sqrt[3]{3}} =$$

$$d. \frac{-5}{\sqrt[3]{6^5}} =$$

4. Racionaliza.

$$a. \frac{\sqrt{5}}{-\sqrt{5} + \sqrt{3}} =$$

$$d. \frac{-1}{-\sqrt{3} - 5} =$$

$$b. \frac{-2}{\sqrt{2} + \sqrt{5}} =$$

$$e. \frac{3}{\sqrt{3} + 2} =$$

$$c. \frac{5}{-\sqrt{3} + \sqrt{2}} =$$

$$f. \frac{-\sqrt{3} - 2}{\sqrt{7} - 4} =$$