

V) Resuelve las siguientes potencias

① $(2a^2b \sqrt[3]{12ab^2})^2$ ② $2a^2 (b \sqrt[4]{18a^2b})^3$

③ $3m^2n (\sqrt[3]{36m^2n})^2$ ④ $[(2a+2b) \sqrt[3]{a^2+2ab+b^2}]^2$

⑤ $(6a^2+6a) [\sqrt[3]{(a^2-1)^2(a^2-a-2)}]^2$ ⑥ $(3\sqrt{2})^2$

⑦ $(5\sqrt{2})^3$ ⑧ $(3+2\sqrt{3})^2$ ⑨ $(2\sqrt{2}-3)^3$ ⑩ $(2\sqrt{2}-3\sqrt{3})^3$

⑪ $(2\sqrt{3}-1)^4$ ⑫ $(2\sqrt{3}-3\sqrt{2})^4$ ⑬ $(2\sqrt{2}-1)^4 - 2\sqrt{2}(2\sqrt{2}+1)^5$

VII Resuelve los siguientes ejercicios expresando correctamente en un solo radical

① $3a^2 \sqrt[3]{6a^2b \sqrt{30ab}}$ ② $(4x+4) \sqrt{(x^2-1) \sqrt{6x^2+18x+6}}$

③ $2a [3a^2b (12ab^2)^{2/3}]^{3/4}$ ④ $5x \sqrt[5]{x^2y \sqrt[3]{xy^2} \cdot \sqrt{xy}}$

④ $3a \sqrt[3]{2a^2b \sqrt[4]{12ab \sqrt{3b} \cdot 2b \sqrt[3]{4b}} \sqrt[4]{24a^3b^2}}$

⑤ $4a^2b \sqrt[4]{2\sqrt{3ab} \cdot 3a^2(12ab)^{0,75} \cdot [3a^2b \sqrt{2a}]^{0,3}}$

⑥ $3\sqrt[3]{2a^2b} \left\{ 2ab^{1/2} [3a^2b \sqrt[3]{12a^2b} \cdot 6b \sqrt{6ab}]^{3/2} \right\}^{1/4}$

VIII Resuelve los siguientes ejercicios con raíces

① $\frac{3\sqrt{2}-5}{3} - \frac{4\sqrt{2}-1}{2} + \frac{7\sqrt{2}+3}{4}$

② $\frac{(3\sqrt{2}+1)^2 \cdot (2\sqrt{3}+1)}{3} - \frac{(4\sqrt{2}-3\sqrt{3})(3\sqrt{2}-\sqrt{3})}{2} + \frac{3\sqrt{6}-1}{4}$

③ $(2\sqrt{3}-1)(2\sqrt{3}+1) - (4\sqrt{2}+2)(4\sqrt{2}-3)$

④ $(2\sqrt{3}-1)(2\sqrt{2}+1)(2\sqrt{3}+3) - (\sqrt{3}+2\sqrt{2}+\sqrt{3}-3\sqrt{2}) - 5\sqrt{6}$

⑤ $\frac{(3\sqrt{2}+1)^2}{3} - \frac{(4\sqrt{2}+3)^3}{2} - \frac{7-\sqrt{2}-\sqrt{6}}{4}$