

EJERCICIOS DE RADICALES

1.- Sacar factores de:

- a) $\sqrt{50}$ sol: $5\sqrt{2}$
b) $\sqrt{243}$ sol: $9\sqrt{3}$
c) $\sqrt{3125}$ sol: $25\sqrt{5}$

2.- Calcular y simplificar:

- a) $\sqrt{72} + \sqrt{27} + \sqrt{12} =$ sol: $6\sqrt{3}$ e) $\sqrt{2} \cdot \sqrt[3]{2} \cdot \sqrt[4]{2} =$ sol: $2^{12}\sqrt{2}$
b) $5\sqrt{3} \cdot \sqrt{12} =$ sol: 30 f) $\sqrt[5]{\frac{3}{5}} \cdot \sqrt[6]{\frac{1}{3}} =$ sol: $\sqrt[30]{\frac{3}{5^6}}$
c) $\sqrt[3]{16} : \sqrt[4]{2} =$ sol: $2^{12}\sqrt{2}$ g) $\frac{\sqrt[3]{16}}{\sqrt{2}} =$ sol: $\sqrt[6]{32}$
d) $\sqrt[3]{7} \cdot \sqrt[4]{5} =$ sol: $\sqrt[3]{30}$ h) $\sqrt{50} + \sqrt{2} =$ sol: $6\sqrt{2}$

3.- Calcular y simplificar:

- a) $\frac{3}{\sqrt{7}} =$ sol: $\frac{3\sqrt{7}}{7}$ d) $\frac{6}{\sqrt{3} - \sqrt{2}} =$ sol: $6\sqrt{3} + 6\sqrt{2}$
b) $\frac{5 + 3\sqrt{2}}{\sqrt{3}} =$ sol: $\frac{5\sqrt{3} + 3\sqrt{6}}{3}$ e) $\frac{3 + \sqrt{2}}{\sqrt{7} + \sqrt{3}} =$ sol: $3\sqrt{7} - 3\sqrt{3} + \sqrt{14} - \sqrt{6}$
c) $\frac{4}{\sqrt[7]{5}} =$ sol: $\frac{4\sqrt[7]{5^6}}{5}$ f) $\frac{a}{\sqrt{a} + \sqrt{b}} =$ sol: $\frac{a\sqrt{a} + a\sqrt{b}}{a - b}$