## 005-CLASE 5 - RADICALES - PARTE 3 – SUMA Y RESTA DE RADICALES, RACIONALIZACIÓN

## 1) Simplifica las expresiones

A. 
$$3\sqrt[3]{2} + 4\sqrt[3]{2} - 2\sqrt[3]{2}$$

B. 
$$2\sqrt{3} + 3\sqrt{3} - 9\sqrt{3}$$

C. 
$$\sqrt{50} - \sqrt{72} - 2\sqrt{2}$$

D. 
$$\sqrt{8} - 3\sqrt{2} + 4\sqrt{18} + \sqrt{50}$$

E. 
$$\sqrt{3} - 3\sqrt{12} + 5\sqrt{27}$$

F. 
$$\sqrt{12} + 5\sqrt{3} - \sqrt{27}$$

G. 
$$\sqrt{12} - \sqrt{27} + \sqrt{3}$$

H. 
$$\sqrt{18} + \sqrt{50} - \sqrt{8} - \sqrt{2}$$

I. 
$$\sqrt{45} - \sqrt{20} + \sqrt{80} - \sqrt{5}$$

J. 
$$\sqrt{27} - \sqrt{12} - \sqrt{75} + \sqrt{3}$$

K. 
$$\sqrt{45} - \sqrt{20} + \sqrt{180}$$

L. 
$$2a\sqrt{2} - \sqrt{8} + 3\sqrt{2}$$

M. 
$$7\sqrt{54} - 3\sqrt{18} + \sqrt{24} - \frac{3}{5}\sqrt{50} - \sqrt{6}$$

N. 
$$\sqrt{\frac{3}{2}} + \sqrt{\frac{2}{3}} - \sqrt{6} + \sqrt{\frac{1}{6}}$$

## 2) Racionaliza las siguientes fracciones

A. 
$$\frac{1}{\sqrt{3}}$$

B. 
$$\frac{\sqrt{3}}{\sqrt{5}}$$

C. 
$$\frac{5}{\sqrt{6}}$$

D. 
$$\frac{10}{\sqrt{6}}$$

E. 
$$\frac{\sqrt{15}}{\sqrt{125}}$$

F. 
$$\frac{3}{2\sqrt{5}}$$

$$\mathsf{G.} \quad \frac{2\sqrt{3}}{\sqrt{2}}$$

H. 
$$\frac{4\sqrt{6}}{\sqrt{2}}$$

1. 
$$\frac{7-2\sqrt{3}}{\sqrt{3}}$$

J. 
$$\frac{\sqrt{6}-1}{2\sqrt{5}}$$

K. 
$$\frac{28}{3\sqrt{7}}$$

L. 
$$\frac{3}{\sqrt[3]{6}}$$

M. 
$$\frac{4}{\sqrt[4]{2}}$$

N. 
$$\frac{4}{\sqrt[4]{8}}$$

P. 
$$\frac{4}{\sqrt{12!}}$$

Q. 
$$\frac{5}{\sqrt[5]{27}}$$

## 3) Racionaliza la siguiente fracciones

A. 
$$\frac{3}{\sqrt{5}+3}$$

B. 
$$\frac{8}{6-\sqrt{12}}$$

$$C. \quad \frac{1}{\sqrt{2} - \sqrt{3}}$$

D. 
$$\frac{2\sqrt{5}}{\sqrt{5}+2}$$

E. 
$$\frac{1+\sqrt{2}}{1-\sqrt{2}}$$

F. 
$$\frac{\sqrt{2}-\sqrt{3}}{\sqrt{2}+\sqrt{3}}$$

G. 
$$\frac{\sqrt{3}}{\sqrt{2}-\sqrt{3}}$$

H 
$$\frac{2}{\sqrt{2}-\sqrt{2}}$$

$$\begin{array}{c} 11. \\ \hline 1+\sqrt{2} \\ \hline 1 \end{array}$$

$$J. \quad \frac{\sqrt{5} - \sqrt{3}}{\sqrt{5} + \sqrt{3}}$$

$$\sqrt{5}+\sqrt{3}$$
K.  $\frac{\sqrt{2}}{\sqrt{2}}$ 

L. 
$$\frac{10}{2\sqrt{3}-\sqrt{2}}$$