

PROBLEMAS DE EXPRESIONES ALGEBRAICAS Y OPERACIONES

Problema 31:

Resolver

$$A) 8\sqrt{\frac{3}{4}} - \frac{1}{2}\sqrt{12} + 4\sqrt{27} - 2\sqrt{\frac{3}{16}}$$

$$B) 2\sqrt{\frac{5}{3}} + \sqrt{60} - \sqrt{\frac{3}{5}}$$

Solución Problema 31:

$$A) 8\sqrt{\frac{3}{4}} - \frac{1}{2}\sqrt{12} + 4\sqrt{27} - 2\sqrt{\frac{3}{16}} =$$

$$\frac{8}{2}\sqrt{3} - \frac{1}{2}\sqrt{4 \times 3} + 4\sqrt{9 \times 3} - \frac{2}{4}\sqrt{3} =$$

$$4\sqrt{3} - \frac{2}{2}\sqrt{3} + 4 \times 3\sqrt{3} - \frac{1}{2}\sqrt{3} = 4\sqrt{3} - \sqrt{3} + 12\sqrt{3} - \frac{1}{2}\sqrt{3}$$

$$\frac{8\sqrt{3} - 2\sqrt{3} + 24\sqrt{3} - \sqrt{3}}{2} = \frac{29\sqrt{3}}{2}$$

$$B) 2\sqrt{\frac{5}{3}} + \sqrt{60} - \sqrt{\frac{3}{5}} = \frac{2\sqrt{5x\sqrt{3}}}{\sqrt{3x\sqrt{3}}} + \sqrt{5 \times 2 \times 2 \times 3} - \frac{\sqrt{5x\sqrt{3}}}{\sqrt{5x\sqrt{5}}} =$$

$$\frac{2\sqrt{15}}{3} + 2\sqrt{15} - \frac{\sqrt{15}}{5} = \frac{10\sqrt{15} + 30\sqrt{15} - 3\sqrt{15}}{15} = \frac{37\sqrt{15}}{15}$$