

EJERCICIOS

Nota: Realiza la descomposición prima, para evitar cálculos grandes.

a) $\sqrt{40} + \sqrt{90}$

a) *Simplificando:*

$$\sqrt{} = \sqrt{2^2 \times 2 \times 5} = 2\sqrt{10}.$$

$$\sqrt{} = \sqrt{2 \times 3^2 \times 5} = 3\sqrt{10}.$$

Efectuando:

$$\begin{aligned}\sqrt{40} + \sqrt{} &= 2\sqrt{} + 3\sqrt{10} \\ &= \sqrt{}\end{aligned}$$

b) $\sqrt{80} + \sqrt{45}$

b) *Simplificando:*

$$\sqrt{} = \sqrt{2^2 \times 2^2 \times 5} = 2 \times 2\sqrt{5} = 4\sqrt{5}.$$

$$\sqrt{} = \sqrt{3^2 \times 5} = 3\sqrt{5}.$$

Efectuando:

$$\begin{aligned}\sqrt{80} + \sqrt{} &= 4\sqrt{5} + 3\sqrt{5} \\ &= \sqrt{}\end{aligned}$$

c) $\sqrt{28} - \sqrt{63}$

c) *Simplificando:*

$$\sqrt{} = \sqrt{2^2 \times 7} = 2\sqrt{7}.$$

$$\sqrt{63} = \sqrt{3^2 \times 7} = 3\sqrt{7}.$$

Efectuando:

$$\begin{aligned}\sqrt{} - \sqrt{} &= 2\sqrt{7} - 3\sqrt{7} \\ &= -\sqrt{}\end{aligned}$$

d) $\sqrt{32} - \sqrt{8}$

d) *Simplificando:*

$$\sqrt{} = \sqrt{2^2 \times 2^2 \times 2} = 2 \times 2\sqrt{2} = 4\sqrt{2}.$$

$$\sqrt{} = \sqrt{2^2 \times 2} = 2\sqrt{2}.$$

Efectuando:

$$\begin{aligned}\sqrt{} - \sqrt{8} &= 4\sqrt{2} - 2\sqrt{2} \\ &= \sqrt{}\end{aligned}$$