

EJERCICIO MIBE3308:

"achimagec.com"

Racionalizar y simplificar:

$$a.- \frac{3-\sqrt{2}}{3+\sqrt{2}} =$$

$$b.- \frac{5x}{\sqrt[3]{x}} =$$

$$\begin{aligned} a.- & \frac{(3-\sqrt{2})}{(3+\sqrt{2})} \cdot \frac{(3-\sqrt{2})}{(3-\sqrt{2})} = \\ & = \frac{9-3\sqrt{2}-3\sqrt{2}+\sqrt{2}\cdot\sqrt{2}}{(3)^2-(\sqrt{2})^2} = \\ & = \frac{9-6\sqrt{2}+2}{9-2} = \boxed{\frac{11-6\sqrt{2}}{7}} \end{aligned}$$

$$\begin{aligned} b.- & \frac{5x}{\sqrt[3]{x}} \cdot \frac{\sqrt[3]{x^2}}{\sqrt[3]{x^2}} = \\ & = \frac{5x \cdot \sqrt[3]{x^2}}{\sqrt[3]{x^3}} = \frac{5\cancel{x} \cdot \sqrt[3]{x^2}}{\cancel{x}} = \\ & = \boxed{5 \sqrt[3]{x^2}} \end{aligned}$$