

EJERCICIO M28E30J2:

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$$\int \frac{\sqrt[3]{x} + 2\sqrt{3x}}{x} dx =$$

$$= \int \frac{\sqrt[3]{x}}{x} dx + \int \frac{2\sqrt{3x}}{x} dx =$$

$$= \int x^{1/3} \cdot x^{-1} dx + 2\sqrt{3} \int \frac{\sqrt{x}}{x} dx =$$

$$= \int x^{\frac{1}{3}-1} dx + 2\sqrt{3} \int x^{\frac{1}{2}-1} dx =$$

$$= \int x^{-\frac{2}{3}} dx + 2\sqrt{3} \int x^{-\frac{1}{2}} dx =$$

$$= \frac{x^{-\frac{2}{3}+1}}{-\frac{2}{3}+1} + 2\sqrt{3} \cdot \frac{x^{-\frac{1}{2}+1}}{-\frac{1}{2}+1} =$$

$$= \frac{x^{\frac{1}{3}}}{\frac{1}{3}} + 2\sqrt{3} \frac{x^{\frac{1}{2}}}{\frac{1}{2}} =$$

$$= 3 \cdot x^{\frac{1}{3}} + 4\sqrt{3} \cdot \sqrt{x} =$$

$$= \boxed{3 \cdot \sqrt[3]{x} + 4\sqrt{3x} + C}$$